

THE MILLING WORLD

AND

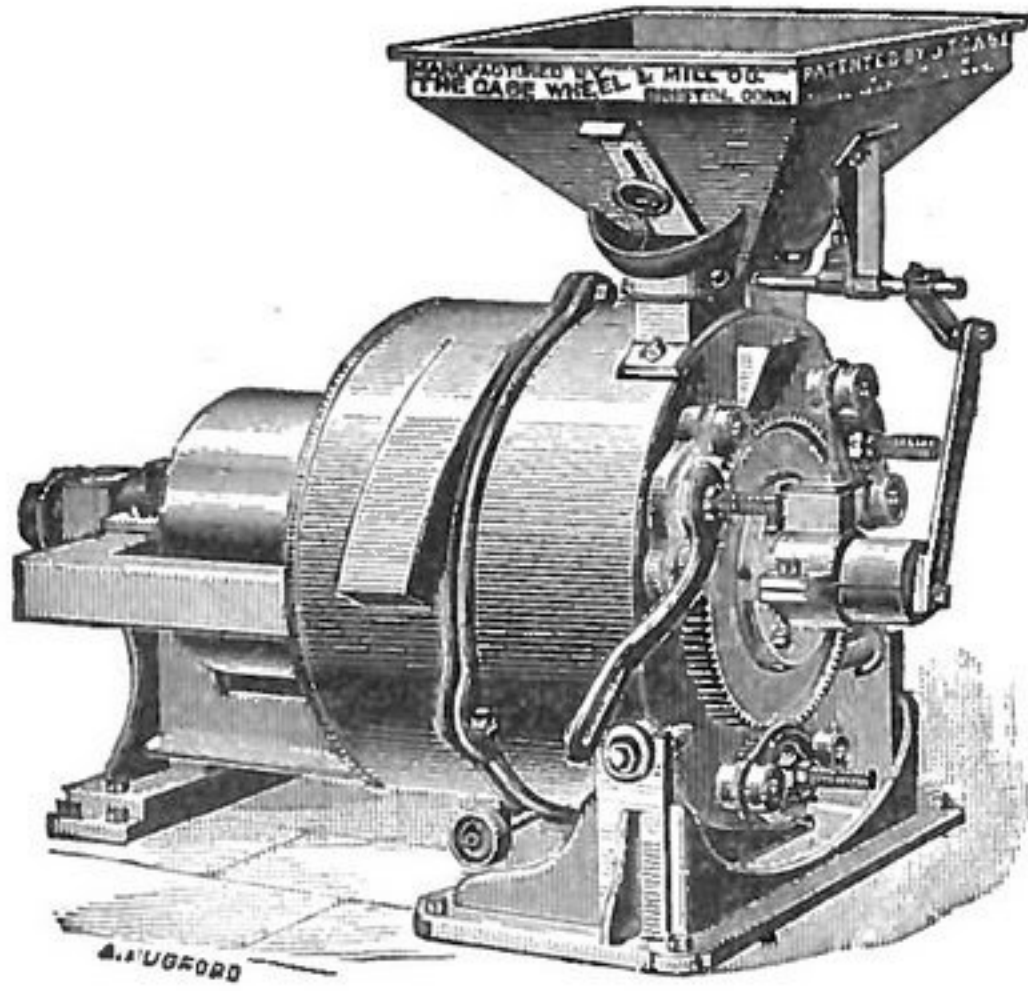
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XXI. No. 21.

BUFFALO, N. Y., JANUARY 20, 1890.

\$1.50 PER YEAR.



VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS.

(J. T. CASE'S PATENT.)

FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

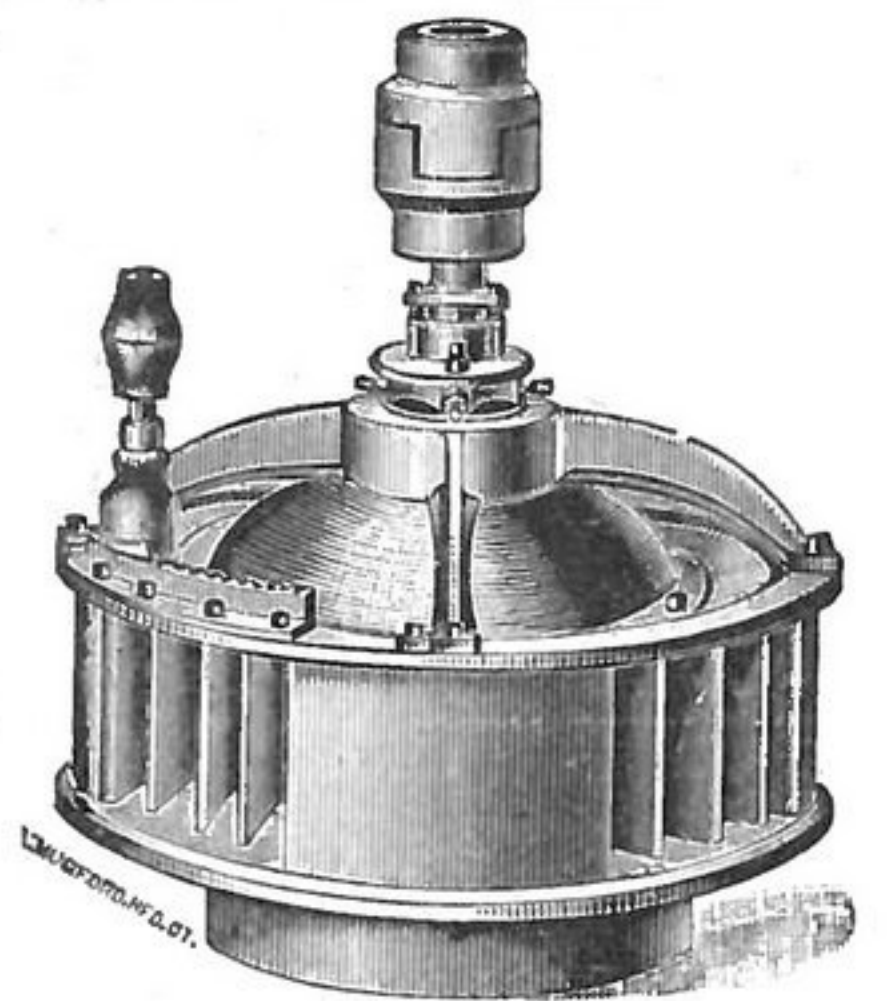
"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & Co., Meriden, Conn.
 "Superior to any mill in use."—GEO. WESTON, Bristol, Conn.
 "The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.
 "We take pleasure in recommending it."—GARLAND, LINCOLN & Co., Worcester, Mass.

SEND FOR CATALOGUE—ILLUSTRATED AND DESCRIPTIVE.

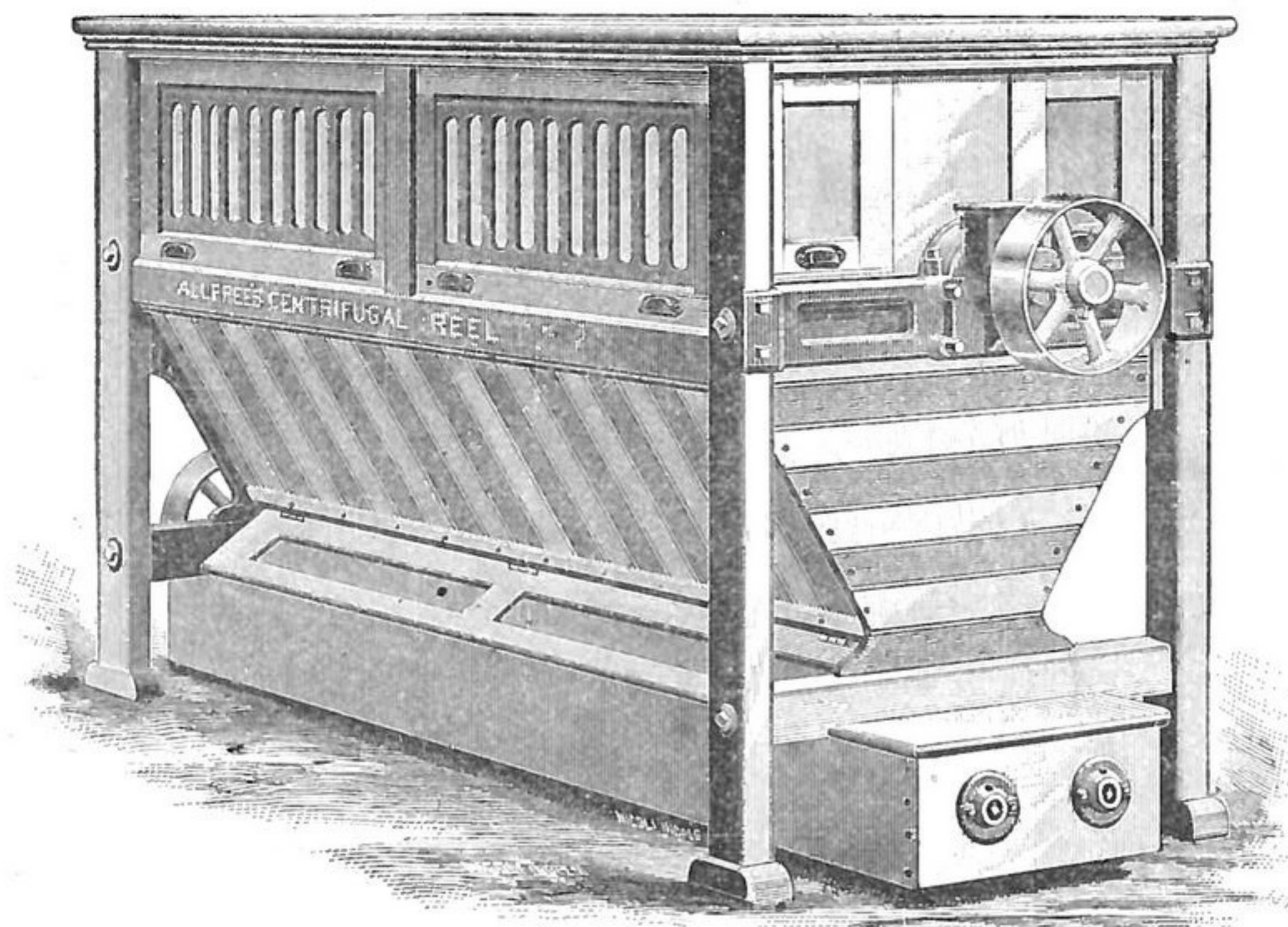
The Improved National Turbine Water Wheel

The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUNDRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.

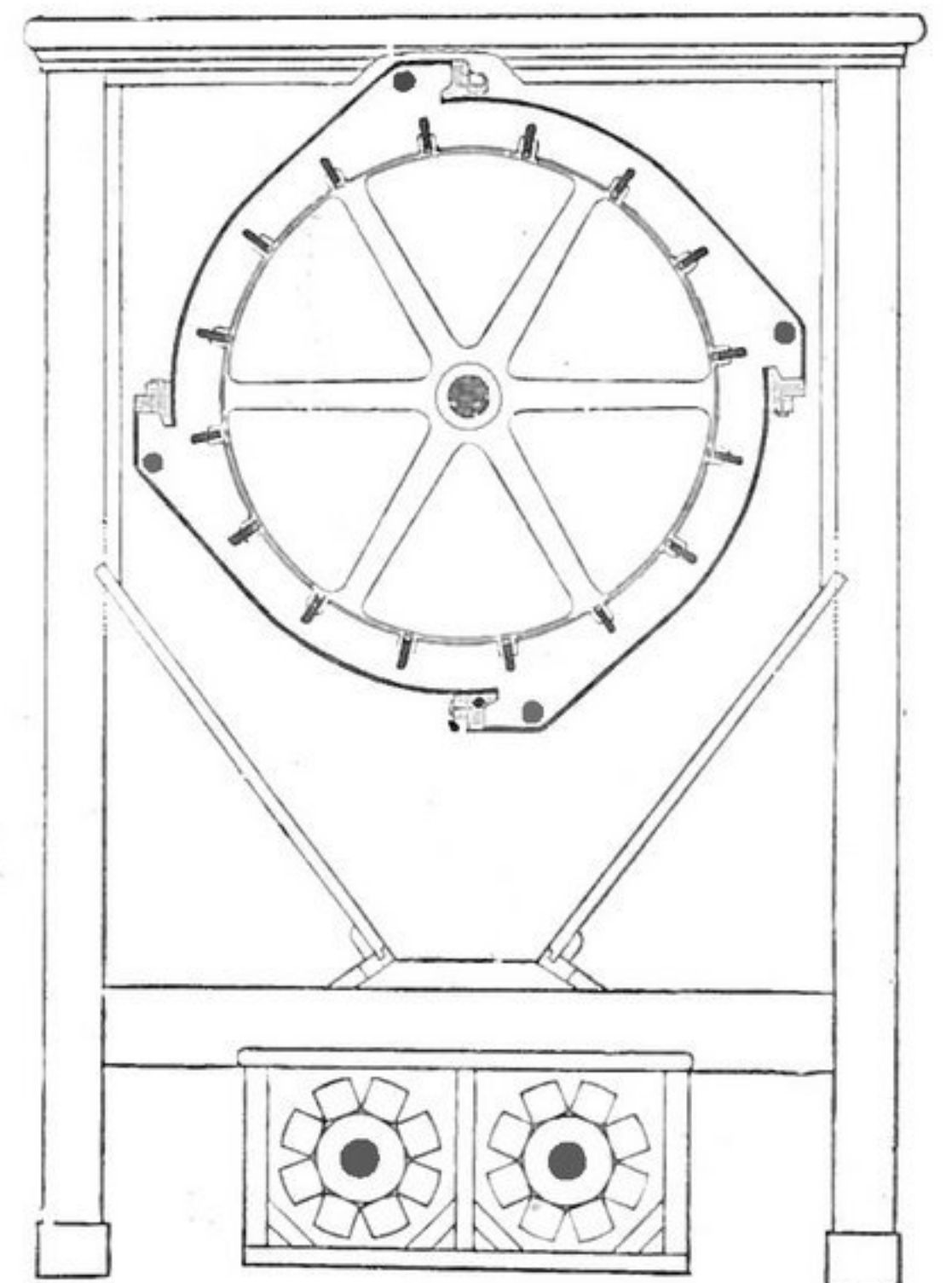
The Case Wheel & Mill Co., Bristol, Conn.



THE "ALLFREE" CENTRIFUGAL REEL



"A PAYING INVESTMENT TO ANY MILL ADOPTING IT."



THE J. B. ALLFREE CO., INDIANAPOLIS, IND.

SHELBYVILLE, IND., DEC. 16, 1889.

GENTLEMEN: Replying to your favor of the 9th inst., asking how I am suited with the Centrifugal put in the "Brandywine Mills" last June, will say that it is a happy surprise. IT DOES MORE THAN YOU CLAIMED FOR IT to my entire satisfaction (remember you induced me to use a No. 2 instead of a No. 1 in my fifty-barrel mill). Judging from the amount of stock it can handle, would think a No. ½ would be large enough for my mill. IT MAY BE EQUALED BUT NEVER SURPASSED AS A PERFECT AND LIGHT RUNNING MACHINE. I can heartily recommend your Centrifugal, and am satisfied that it will prove a PAYING INVESTMENT TO ANY MILL ADOPTING IT. Wishing you the best of success, I remain, respectfully,

JOSHUA HERING.

ADDRESS FOR CATALOGUE AND PRICES

THE J. B. ALLFREE CO.

MILL BUILDERS & GENERAL MILL FURNISHERS.

76 TO 186 SHELBY ST., INDIANAPOLIS, IND.

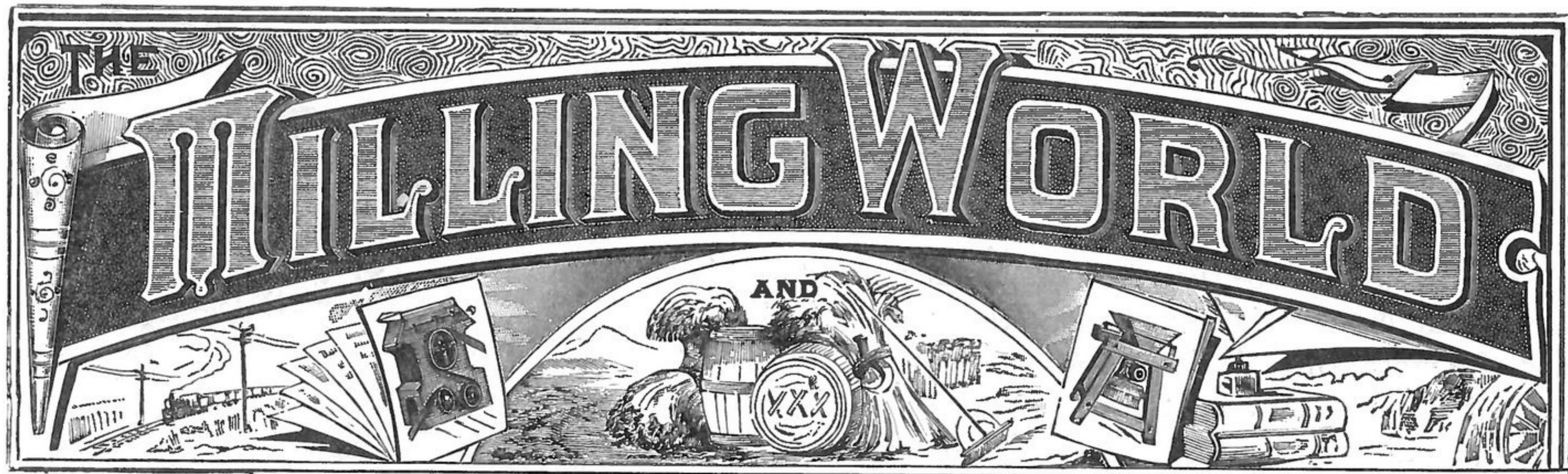
CASE.

CASE MFG. CO., COLUMBUS, O.
GENTLEMEN: If we were to build a hundred mills we
would not permit any other than the "CASE" roll to
enter them. They are the best roll on earth.
Yours truly,

W. C. MANSFIELD & CO.

W. C. MANSFIELD & CO.,
MERCHANT MILLERS,
CLEVELAND, TENN., AUG. 29, 1889.

CASE.



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CHICAGO has her aromatic river, the big "Auditorium" and "Old Hutch." Why should she hanker after the World's Fair? Does she want the earth?

HAS any statistician yet attempted seriously to compute the actual yearly capacity of the flouring-mills of the United States? How far short of 150,000,000 barrels a year would their aggregate capacity fall, allowing the mills to be run 24 hours a day the year around?

ALTHOUGH wheat is "statistically stronger than it has been for years," according to the dictum of the guessers and gabblers, the price continues to sag below the lowest notch ever recorded, according to the frigid facts and figures of the market reports. Everything seems to be going by contraries this year. Probably when the discouraged guessers really begin to think that wheat is really weak, it will bound upward like a rocket.

IF North Dakota, South Dakota and Minnesota, in a season of excessive drouth and winds strong enough to blow the seed out of the ground, can grow 90,000,000 bushels of fine wheat, it would be an interesting operation to compute what they could or would produce in an average or unusually favorable season. With the great undeveloped areas in those three States, and another great area in Montana available for wheat, the wheat consumers of the United States may well look upon the Northwest as the "granary of the country."

EUROPEAN milling dividends for 1889 were not uncomfortably large, and, as the unfavorable conditions that ruled during the last half of 1889 will influence affairs until the crop of 1890 shows its quantity and quality, the dividends for 1890 will not be abnormally large. Meanwhile, American millers are moderately prosperous, grinding a grand total of at least 75,000,000 barrels a year, the larger part of which goes into home consumption. This is what makes American milling a solid business, an already great and a constantly growing home market for flour, with abundant supplies of home-grown wheat to grind.

THE Antiquated Benjamin Peters Hutchinson, alias "Old Hutch," of Chicago, still holds the stage against the Chicago mob. According to general report "Old Hutch" must be about the very toughest old demon out of Sheol, but the ease with which he combats the combined resources, enterprise, experience, hatred, malignancy and active hostility of the whole gambling crowd in Chicago indicates that he is a remarkable man. Just now it is asserted that he is buying May wheat for a gigantic corner, and yet his opponents can not decide whether the assertion is true or false, and they do not dare to combine openly to make "Old Hutch" show his hand. Next to the Czar of Russia, "Old Hutch" seems to be the most thoroughly abused man living.

IF the report be true that the Ogilvie Milling Company, of Winnipeg, has "cornered" the wheat crop of Manitoba, acting on private information that the Canadian govern-

ment would during the winter increase the duty on flour and grain imported into Canada, the case illustrates the corruption that has crept into Canadian politics. It seems almost incredible that the authorities of any country could be base enough thus to enable private concerns to profit from a knowledge of governmental intentions, but the assertion, or imputation, is openly made in Canada, and no denial has yet been made. Evidently, with the Canadian Pacific Railway bleeding the Canadians for the benefit of the Americans and with a private corporation "cornering" the wheat of a province on information obtained somehow from governmental sources, the average Canuck may well be pardoned for looking towards the land of the Yankee with longing. Canadian politics under the Macdonald regime seem to be intensely peanut.

SECRETARY BARRY, of the Millers' National Association, is either the victim of certain very injudicious friends, who are publishing his portrait with a fulsomely flattering sketch of his life, or else he is the victim of a monumental self-conceit that makes him delight in seeing himself represented as a man of great education, as a successful banker, as a wonderful railroad manager, as a prominent milling editor, as a devoted milling enthusiast, as the prop and mainstay of great machinery houses, as a specialist in every conceivable direction, as a prominent Free Mason, as a conspicuous member of the Order of Elks, as a leader in the Ancient Order of United Workingmen, as a principal person in the Royal League, and as the Grand Boomer and Booster of the Knights of Pythias. If Mr. Barry's friends are responsible for all the mush, gush and slush poured upon him, he should sit down upon them before they have cheapened him beyond redemption. If Mr. Barry himself is responsible, his closest friends ought to call him in. He can not boom the Millers' National Association with his secret society record.

SOME amusing cranks are trying to show that there is a great decrease in the number of flouring-mills in the United States, and they fail to point out that the capacity of the modern mills more than compensates the loss in numbers. A correspondent of THE MILLING WORLD recently went over a section in which the decrease in the number of mills has been large. He finds that 50 old-fashioned water-power buhr-mills have dropped out of the race, and that 15 steam-power roller mills have taken their place. The cranks count a loss of 35 mills in that section and deplore the decadence of milling, while in reality the 50 old mills could hardly turn out 1,250 barrels a day, and the 15 new mills are turning out nearly 2,000 barrels a day. Beside the actual increase in capacity noted, account should be taken of the improvement in the quality of the product. Some of the buhr-mills could and did turn out good flour. Most of them did not. The modern roller mill reverses the situation. Some of the modern mills turn out poor flour. Most of them turn out good flour. The cranks may rest easy over the situation. There is no danger that the number of mills in the country will fall below the requirements of the milling business. While there may be a falling off in older sections, there certainly is a great increase in the newer sections of the country.

Dawson's Roller Mill

Is acknowledged to be the very best in the market. It has our Patent Automatic Centrifugal feeder, never failing to feed the stock the full length of rolls in an even sheet. It is the Latest and Best feed out, uses less power and is simple in construction. It can be placed on any style of machine with little expense. We use for roll bearings phosphor-bronze metal which will admit rolls being run at any speed without heating and with little friction, and uses little oil. We use the Dawson Corrugation, which is admitted the best in long or short system mills as the action is granulating rather than CUTTING.

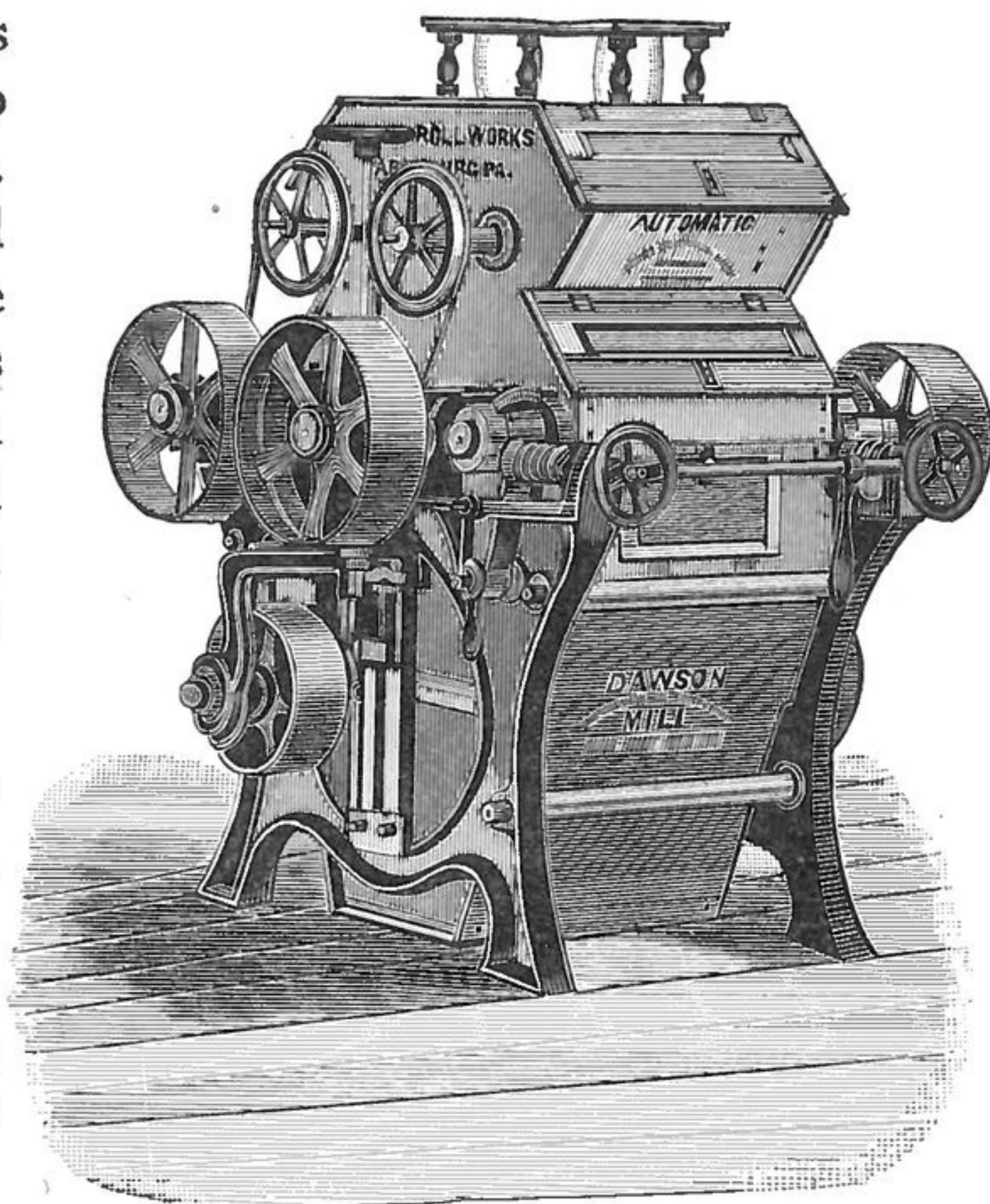
We have a large plant to Re-grind and Re-Corrugate Rolls.

Owing to our late increased facilities and central location we are enabled to ship goods promptly on the shortest notice.

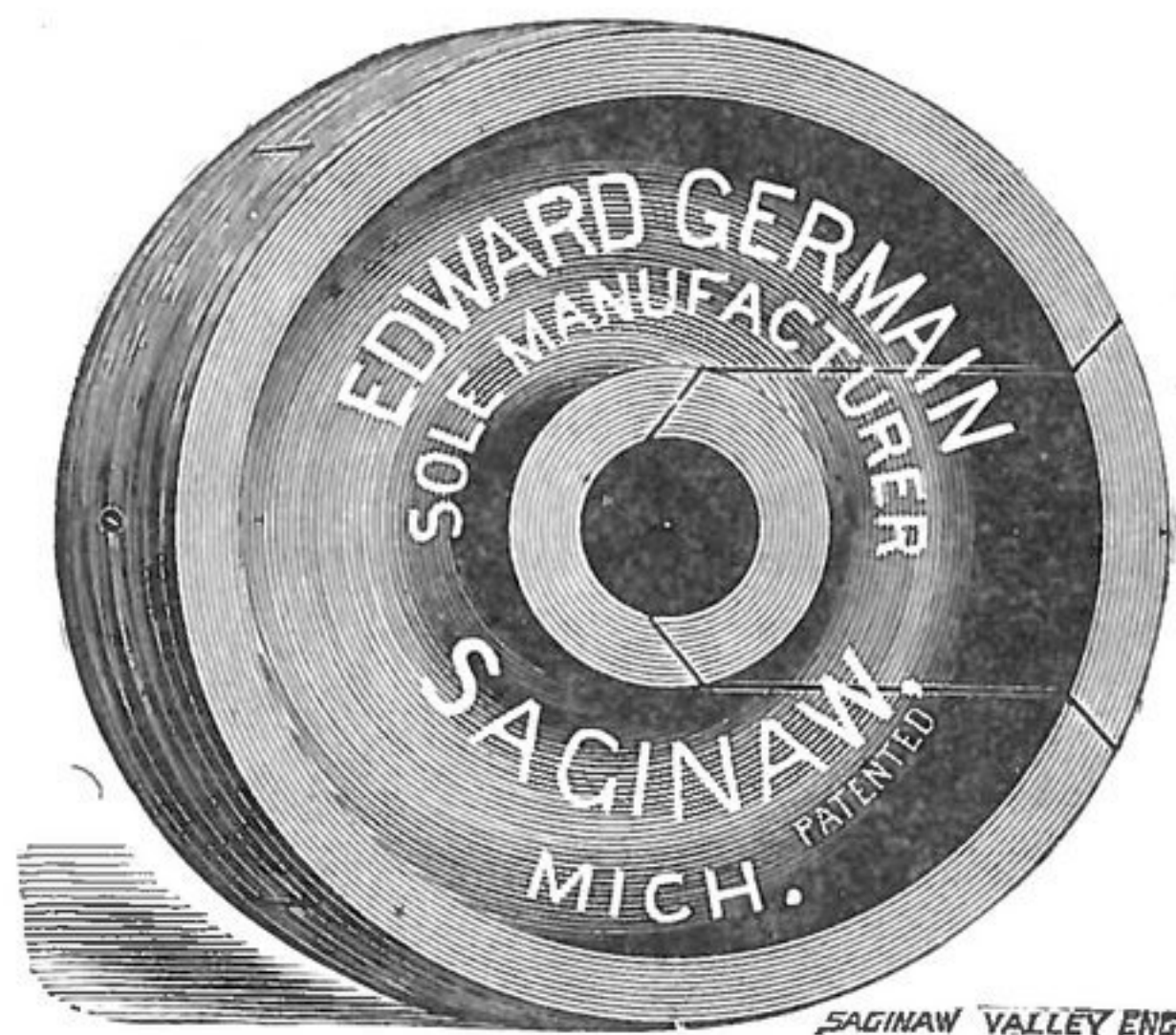
PARTIES CONTEMPLATING REMODELING THEIR MILLS OR BUYING ANY ROLLER MACHINES ARE REQUESTED TO PUT THEMSELVES IN CORRESPONDENCE WITH US.

FOR PRICE LISTS AND CIRCULARS, ADDRESS,

Dawson Roll Works, Harrisburg, Pa.



The Cowles "Reliable" Sectional Wood Pulley



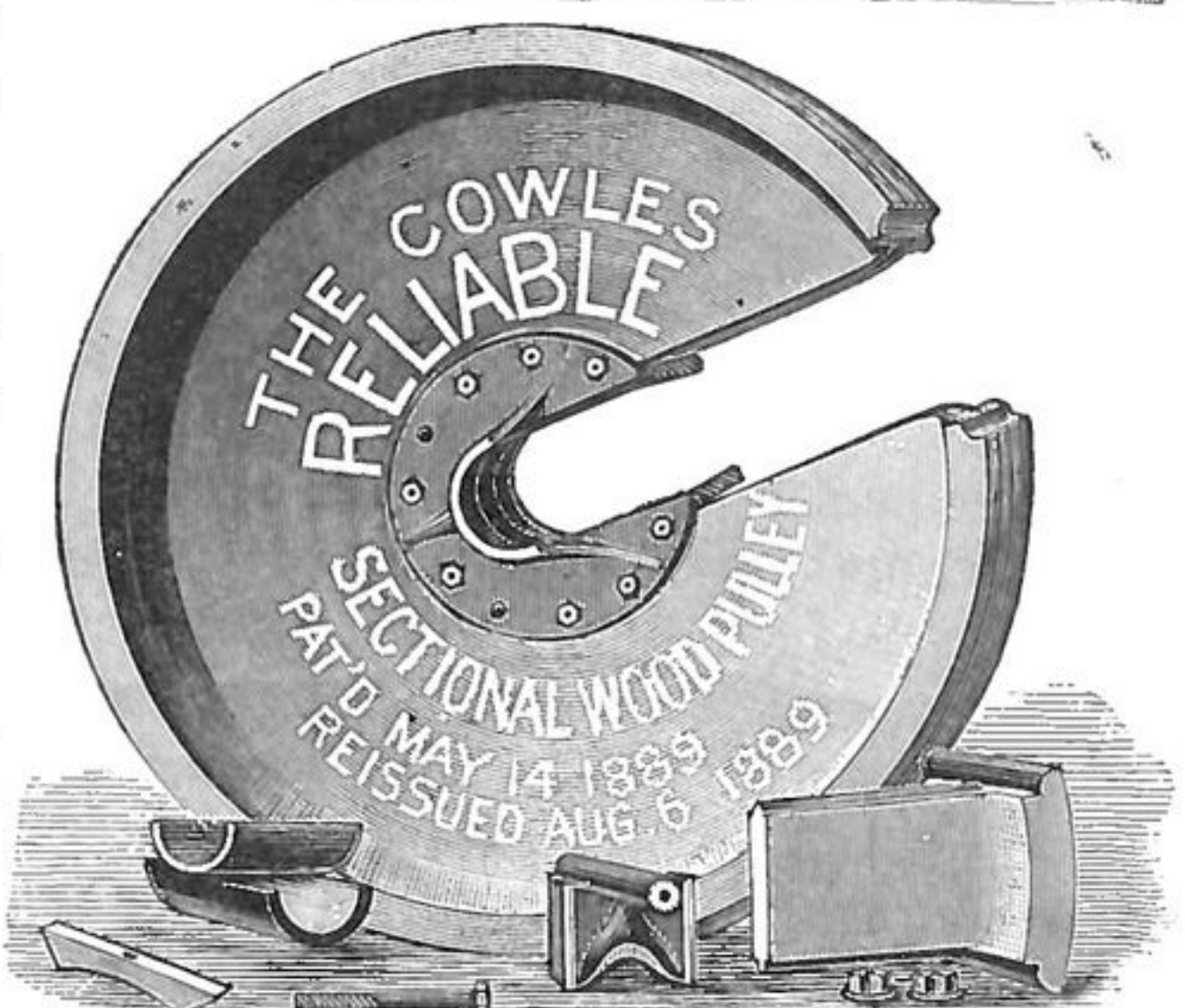
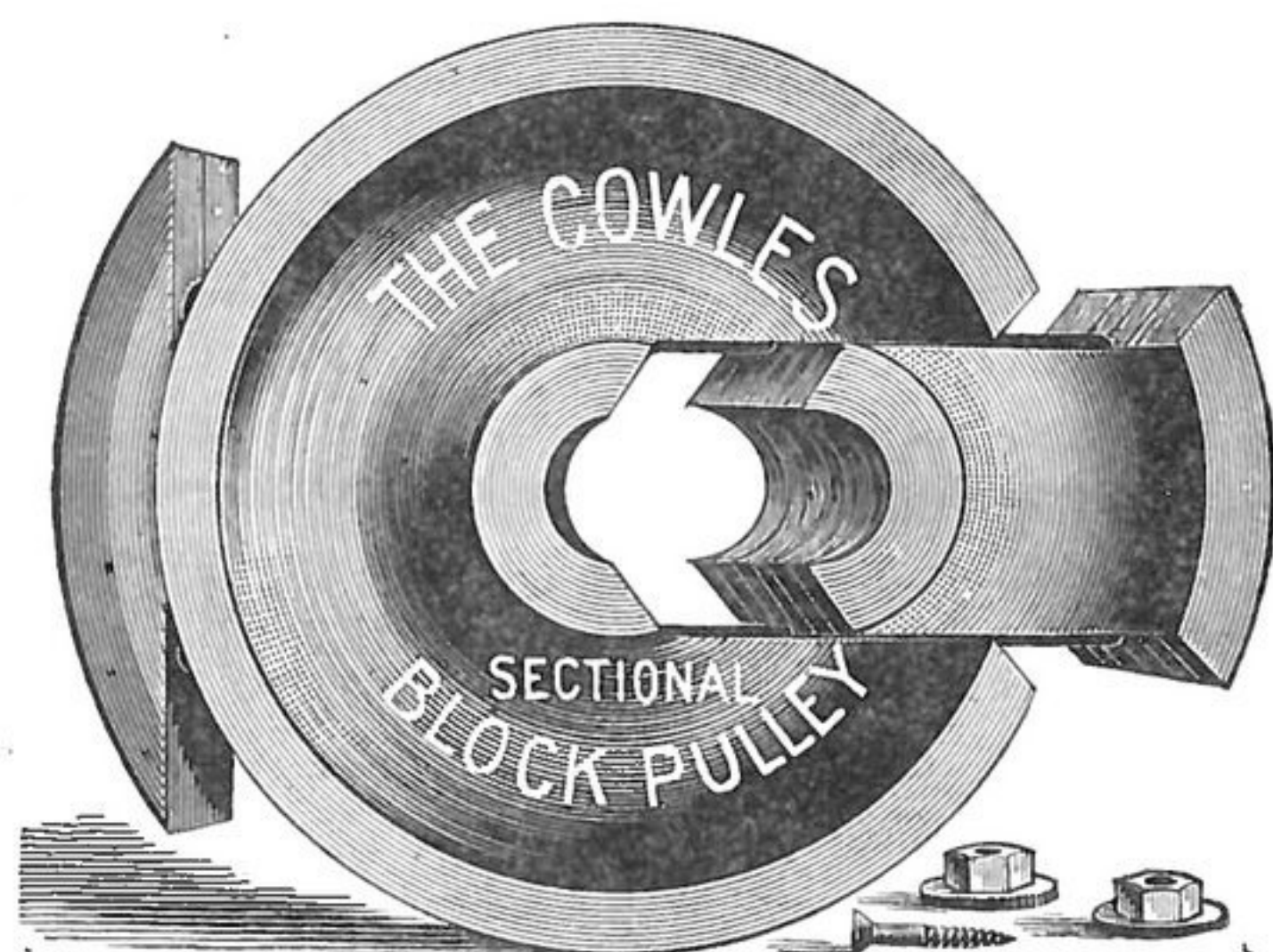
Web made of several layers glued together with grain crossing, and faced up on both sides. Iron flanges securely bolted to web. Rim put on after web has been trued up. Web and rim turned on inside and face, making perfect running pulley. Rim supported entire circumference. Positive self-gripping device for securing pulley to shafting, which is self-centering, and can not slip with wear.



A wooden rim pulley transmits from 30 to 50 per cent. more power with same belt than an iron one.

Two-thirds lighter than iron, bearings will wear longer and the expense for lubricant will be less.

Having solid web, there is no air resistance. The "Reliable" can be placed on shaft or position changed in one-fourth the time required with any other pulley.



EDWARD GERMAIN, SOLE MANUFACTURER SAGINAW, MICH., U.S.A.



PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,
Over Bank of Attica.
McFAUL & NOLAN, - - - PROPRIETORS.
THOMAS MC FAUL. JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application. Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD,
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

WANTED.

Situation wanted by a Miller of 9 years' experience, 24 years of age, of steady habits and willing to work. Address, H. care of The Milling World, Buffalo, N. Y.

WANTED.

Western New York, Ohio and Pennsylvania mills in want of a temperate miller, with 20 years experience, should write to the undersigned, who is now running a first class mill, but would like to make a change this fall. Address, W., care of THE MILLING WORLD. 56

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office 10 cents must be added to pay postage.

FOR SALE.

Merchant and grist mill. The best water-power in Ohio. Situated five miles from Mentor, Ohio. For particulars enquire of C. S. JOHNSON, West Mentor, O. 1216

FOR SALE.

Mill property in Central New York, for much less than it is really worth, with small payment down, or would take a partner with small capital to take charge of and run the mill. Address "B," care of THE MILLING WORLD, Buffalo, N. Y. 1720

FOR SALE.

Several good second-hand and new turbines of various styles. Second-hand price list and descriptive matter and prices of our new machines sent free. Every one interested in the shortest route to successful milling on rolls or in grinding corn and feed with the least expense of power, should address us before buying.

FLENNIKEN TURBINE CO.,
Dubuque, Iowa.

8tf

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

M-I-L-L-E-R-S

Wanting Bolting Cloths should write for discounts on same before purchasing elsewhere to

SAMUEL CAREY
17 Broadway New York.

FOR RENT.

Clinton Mills, at B'ack Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 311 Main Street, Buffalo, N. Y. 6tf

THOSE who have been asserting that there are only 10,000, or 8,000, or only 6,000 flouring-mills in the United States, will be interested in the announcement of Editor Reifsnider, of the St. Louis "Miller," that in compiling his "North American Millers' Register" he has discovered 27,800 mills. Making due allowance for mills found outside of the United States in North America, it will be seen that Editor Reifsnider has succeeded in finding a far larger number of mills in the United States than have generally been thought to exist.

SKEPTICS, who profess to doubt the production of 80,000,000 or 90,000,000 bushels of wheat in the Dakotas and Minnesota, in 1889, will be interested in the statement of Mr. Gautier de Ste. Croix, the English syndicate agent who is paving the way for the shipment of unmixed Dakota and Minnesota wheat directly to British mills. He has been on the ground ever since the harvest began, and, after watching the movements of the grain and gathering all possible information concerning the crop of 1889, he places the total of Minnesota and the two Dakotas at 90,000,000 bushels. In addition to that, he points out that there will be a decided increase in wheat acreage in those three States in 1890, at least five per cent. Mr. De Ste Croix intimates that the wheat-growing capacity of that section is simply incalculable.

THE agricultural bureau of the Province of Ontario, Canada, has reduced its estimate of the wheat crop of that province in 1889 to 18,000,000 bushels. The Manitoba crop has been "officially" whittled down from 12,000,000 bushels to 7,000,000 bushels. The total for Manitoba and Ontario is therefore 25,000,000 bushels, which is still too large by several millions. If Canada has 4,750,000 inhabitants, at a per capita consumption of five bushels her needs would call for 23,750,000 bushels of wheat, which is less than two provinces are said to have grown in 1889, by 1,250,000 bushels. Adding the amounts grown in Quebec and the western territories of the Dominion, which are probably 3,000,000 to 4,000,000 bushels, the production exceeded consumption by 4,000,000 to 5,000,000 bushels. Again, adding the importations of American wheat grain and flour, which are probably equivalent to at least 2,000,000 bushels, it will be seen that, unless the Canadians consume 6 or 7 bushels of wheat per capita per annum, there must be a gross exaggeration in even 25,000,000 bushels for Ontario and Manitoba. The question naturally arises: Are Canadian official reports on crops reliable? The situation seems to prove that they are not.

BRITISH investors in the great flouring-mill enterprise at Rio de Janeiro, Brazil, are not finding that enterprise, of which so much was heard during the past year, a very large bonanza. According to the secretary's report at the December meeting of the shareholders of the concern, the concern had sunk \$42,627. The report of the directors attributed this loss to a series of uncontrollable events, such as a "breakdown of the engines," which necessitated an idleness of nearly eight weeks; the necessity of repeatedly turning over the 5,000 tons of wheat in store to prevent damage by heat and weevil, which increased the expense account greatly; the unsatisfactory working of the elevator, which caused extra expense in unloading cargoes of grain; excessive heat; serious sickness among the English employes. As these things are likely to be constant in Rio de Janeiro, it may be possible that the concern, instead of becoming profitable, as the directors report it certain to do, may continue to show enormous losses right along, until the disgusted investors refuse to pour any more money into it. The difficulties in the way of successful milling in Brazil are very great, indeed, and even British pluck, gold and perseverance may not be able to overcome them. American interest in the Rio de Janeiro concern is limited to its possible or probable effects on the importation of American flour into Brazil.

THE EVANS FRICTION CONE.

The Evans Friction Cone Company have recently made a number of improvements in their devices for the transmission of power. The cut of a set of cones which accompanies this article shows their improved style of cones, such as are used for driving general machinery. These cones are used to great advantage in driving wire-working and wire-making machinery, bleaching, dyeing and drying machines, machine-tools, pumps, bakers' and confectioners' and textile machinery. Larger cones of a pattern similar to that shown in the cut are being extensively used by paper manufacturers for driving their paper machines, and some of the largest and best-known paper manufacturers in the country are using them. By this same system of a loose belt between two pulleys the Evans Company are doing a larger business in supplying their frictions for driving dynamos. It is in successful operation by the city of Boston at its Chestnut Hill pumping station, by the Pettee Machine Co., Newton Upper Falls, Mass.; Franklin Electric Light Co., Franklin, Mass.; Morgan Engineering Co., Alliance, Ohio; North Attleboro Steam Engine Co., North Attleboro, Mass.; Fitchburg Steam Engine Co., Fitchburg, Mass.; Putnam Nail Co., Neponset, Mass., and by the Jamestown Electric Light Co., Jamestown, N. Y., and plants are in course of construction where the power, which will be transmitted to dynamos by this system, will amount to 1500 horse-power. Among the advantages in the use of this system are the following: Only about one-twentieth of the ordinary amount of belting is required, thereby reducing the first cost. It is the simplest method for driving, and the belts will last longer than by any other system of belting. The space required for the engine and dynamo is reduced to a minimum. Each dynamo can be easily started or stopped without slowing the engine, and entirely independently of any other machinery, by simply turning a hand-wheel. More power is guaranteed with the same pressure on the bearings than with ordinary belting. Patents which cover this principle are controlled by the Evans Friction Cone Company, 85 Water street, Boston, Mass.

BRITISH INVESTMENTS IN AMERICA.

Movements of capital are always interesting to the economic student. Just now there is a movement of foreign capital, mostly British, into the United States, and economic authorities are at a loss to account for it or to predict its extent or duration. Recent estimates in London put the market value of the shares and debentures of foreign joint-stock brewing companies, mostly American, dealt in there, at £15,000,000, or \$75,000,000, and, allowing only £5,000,000,

or \$25,000,000, for other enterprises, the whole would come to \$100,000,000 at least. The greater part of the money has been paid in cash, or in obligations which have been turned into cash abroad, so that it constitutes an important addition to the wealth of this country.

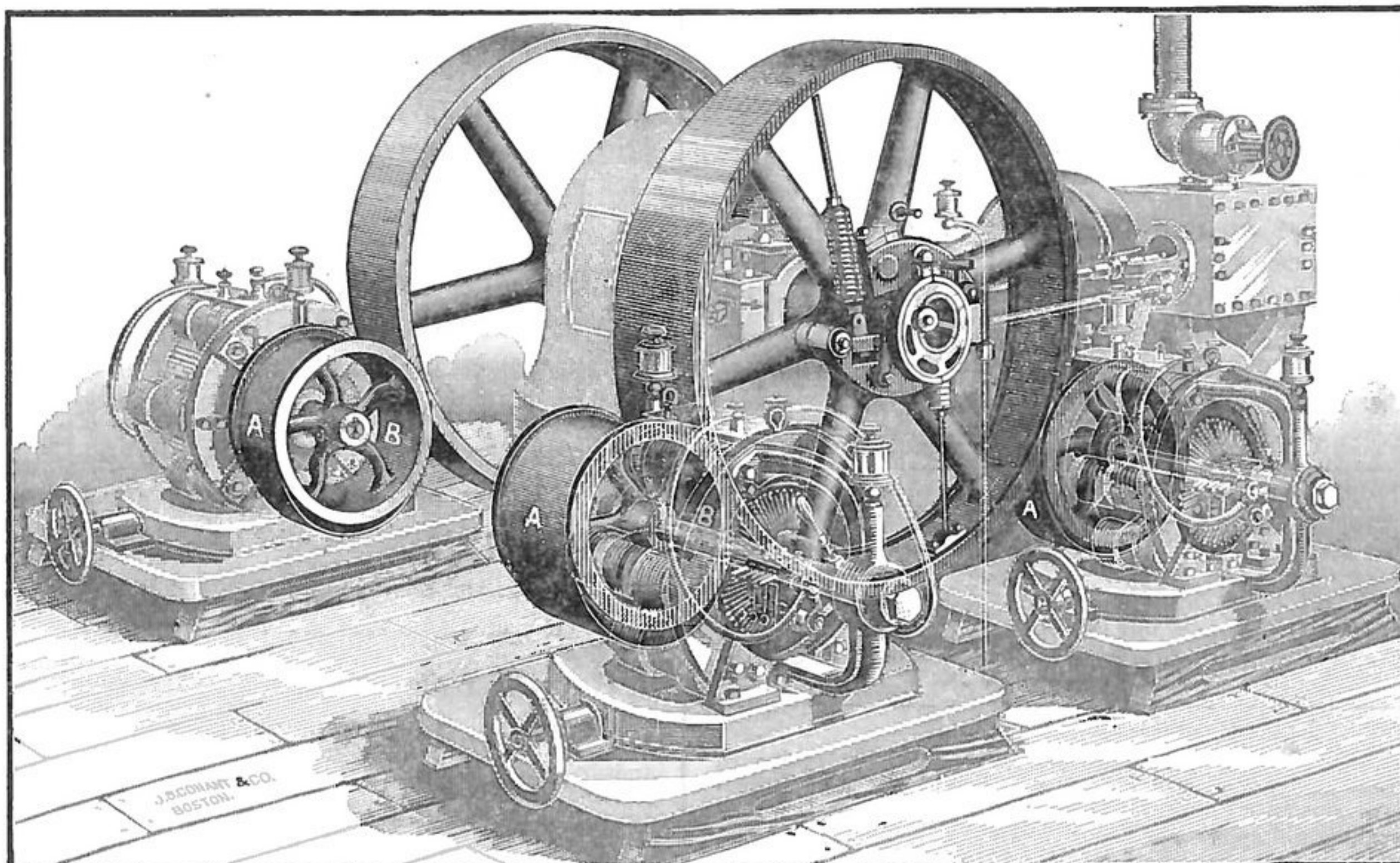
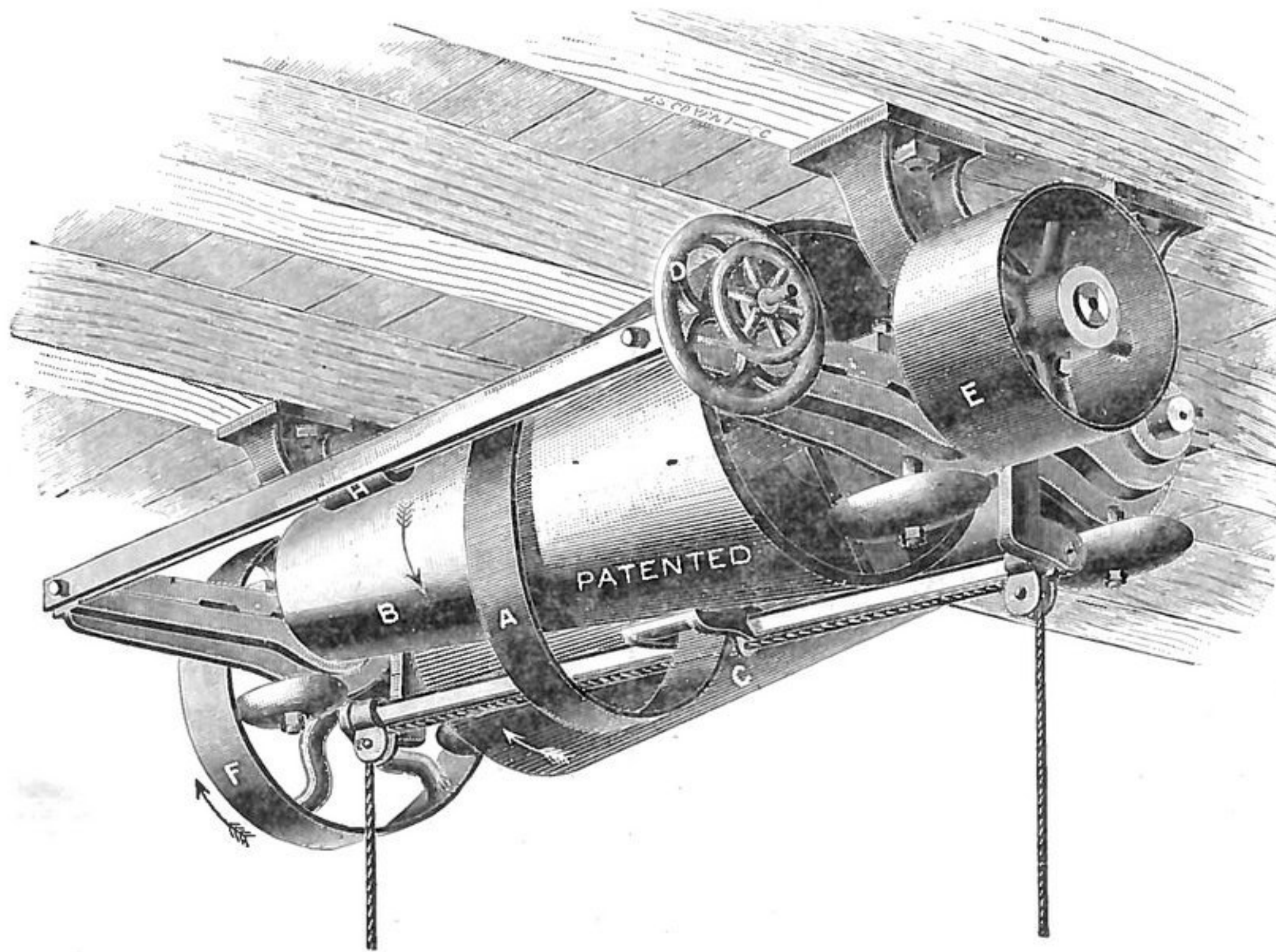
The people engaged in making these investments proceed in a business-like fashion. After selecting the property which they desire to purchase and agreeing upon the terms in a general way, they set expert accountants at work examining all the books of its owners, in order to ascertain from them its earnings for a certain number of years back. By the average of these earnings the price is finally fixed, and by it is determined the amount of stock and debentures of the new company which is to be formed for the purpose of launching the scheme on the European market. Usually the purchase is made on the basis of 10 per cent. per annum,

or ten times the ascertained average annual profits, and 5 per cent. debentures are issued for the whole purchase price, with shares, partly common and partly preferred, to an equal amount. For example, if a property is shown to have yielded an average income of \$100,000 a year, the price paid for it will be \$1,000,000, and 5 per cent debentures for \$1,000,000 will be issued against it, and, in addition, \$1,000,000 in shares. Hence, if the debentures can be disposed of at par, the shares will cost nothing,

except the expenses of negotiating the purchase, and whatever they can be made to bring will be profit. The business thus far has been extremely lucrative, and that it still goes on is not surprising.

Indeed, encouraged by the success which has attended speculations of this kind, some enterprising men have formed stock companies for the mere purpose

of helping them along by lending the necessary money and sharing in the gains. The latest of these, the United States Debenture Company, has a nominal capital of £3,000,000, or \$15,000,000, of which, however, only about £1,000,000, \$5,000,000, have been called up. A portion of the shares offered in the New York market were promptly subscribed for, and the founders' shares, or those given to the persons who joined in defraying the preliminary expenses, which are to receive one-half the profits after paying 7 per cent. per annum dividends on the ordinary shares, and which cost their holders about \$200 apiece, are quoted at \$6,000 to \$7,500 apiece, and even more. The business which the company proposes to do is the purchase of blocks of the debentures of industrial undertakings and jobbing them out to investors, the difference between the wholesale and the retail price constituting the company's gain. By employing professional examiners, and by having representatives on the Boards of



THE EVANS FRICTION-CONE DEVICE.

Directors of the companies issuing the securities, the Debenture Company expects to be able to judge accurately of the value of investments, and to watch their management.

Another method of investing foreign capital in this country, about which little has been said in the newspapers, but which has already been largely followed and will probably be more so in the future, is the plain, old-fashioned one of buying large tracts of mineral lands and developing the wealth they contain. In these cases, besides opening coal and iron mines, the companies have laid out towns, paving and sewerage the streets, and erecting hotels and other necessary buildings, and then sold the lots to the men engaged in the mines and the industries connected with them. Evidently there is a great deal of money in this operation, and success in one instance naturally provokes repetition and imitation, so that the business is likely to increase from this time forth until it is overdone and the natural collapse comes. Those, however, who go in early, and are lucky enough to go out early, will have cause to congratulate themselves.

Although one source of this inflowing stream of wealth is Germany, yet Great Britain furnishes by far the greater part of it. There seems, indeed, to be no end to the riches of that little island. For nearly a century its inhabitants have been sending forth all over the world the products of their skill and labor, and making investments in every nook and corner where they can find places for them, and they are still hard at work doing the same thing. A good illustration of the magnitude of their operations is the following table of subscriptions to new enterprises launched in London during the last six years, printed in "Economist" of Nov. 30:

Total subscribed to date.	Total subscribed for year.
1889..... £175,859,865	1888..... £160,149,000
1888..... 157,643,090	1887..... 98,066,000
1887..... 91,913,000	1886..... 101,074,000
1886..... 94,738,000	1885..... 77,972,900
1885..... 68,679,000	1884..... 109,031,000

It will be seen from this table that the capital subscribed for in the first eleven months of this year is £15,700,000 more than the entire amount for 1888, and nearly double that for 1887. It is true that the whole amount subscribed is not to be paid immediately; but, on the other hand, many subscriptions of previous years have been called up this year, which to some extent supplies the deficiency. We may safely assume that the actual investments of British capital in 1889 will not be less than £150,000,000, or \$750,000,000, and it may be more. This vast sum represents, for the most part, not reinvestments nor the total annual gains of the British people, but only the excess of those gains remaining above expenditures upon necessities and upon pleasures. It is the product, not of gambling nor of stock-jobbing, but of skill and honest hard work, which is the only means of really making money. It is dug out of the ground in the shape of coal, iron, tin, copper and other minerals; it is spun out of our raw cotton, Italian and French silk and the wool of various countries. Some of it is earned by manufacturing hardware and machinery, some by refining sugar, and a vast amount by carrying in steamers from port to port both British and foreign goods. The surplus wealth of Germany has a similar origin. Ever since the war of 1870 that nation has been busy in making the most of its resources, and while its productions are competing with those of Great Britain in the markets of the world, its shipping also competes with hers for the world's carrying trade. As yet much of Germany's capital has been invested within her own boundaries, but it is now overflowing into other lands, and this country is getting some of it. For many years, indeed, American railroad bonds have been favorites with a certain class of Germans, and they are at last beginning to look at our other industries.

POINTS IN MILLING.

"THERE! I knew they'd come down if I held out long enough and strong enough! They've knocked off \$500 from their figures, and I'm just that much in on my new mill!" These words were spoken to me one year ago by a miller who was planning to build a new mill. A responsible firm

had agreed to put up the building and equip it to do a certain amount of work for \$5,000. The miller, after getting their figures and enough of their plans for a guide, had got other houses to bid lower, and finally he brought the first bidders down to \$4,500 and gave them the contract. It was over that contract he was jubilating when I met him.

I CAUTIONED him against believing that he would receive a \$5,000 plant for \$4,500, but he was bent on saving the almighty dollar in first cost. He would not attempt to answer the question as to where the \$500 reduction would be made by the contractors, and he was sure that the plant he was to receive for \$4,500 would be just as good as though he paid \$5,000 for it.

I POINTED out that it was necessary for the builders to come out whole on the job, and that, if the money were stinted, the work must be scamped somewhere enough to let them out whole. His answer was that he would watch the job from beginning to ending, making it impossible for scamping to be done. I predicted that, in case the job were carried through on the proposed basis, the result would be an unsatisfactory plant.

THE other day I visited the town again, and I found the new mill in operation, and I found it verifying my prediction that it would be an unsatisfactory mill. The owner is now not quite certain that he really saved the \$500, out of which he jewed himself and the builders at the same time. He is very sure, however, that his mill is not a satisfactory one in many respects and in some leading essentials. It shows hasty work in planning, building and equipping, and he has never been able to make it do what he wishes it to do. It is yet a new mill, but it is not so good as a new mill should be.

A NEIGHBORING mill, put up by the same house and costing \$5,000, runs all right, but the \$4,500 mill of the same capacity is a partial failure.

OF course, the stern moralist, who can always make the average business man very tired, will say: "It's a crime and a mistake for the builders to hand over a mill that will not prove satisfactory! No reputable house would do such a thing!" The moralist must remember that in this case the owner fixed upon both the size and the cost of the plant, leaving the builders only the choice of building or not building. They chose to build, and in doing so they violated no moral law. They were forced to do as they did, because others stood ready to undertake the job on the owner's terms.

IF there be any immorality in such a transaction, surely the owner is responsible largely for it. He demands, in effect, that one or another firm shall plan him a mill, build it, equip it, start it and hand it over with \$100, or \$200, or possibly more of their money. What right has he to make such a demand upon them? Does he not invite scamping when he enters the field on such a quest? When he advertises for a cheap-John mill, has he the right to expect any thing else? If he is any thing but a fool, can he expect a firm to employ high-wage draughtsmen to work for him, and to put in his mill a grade or a number of machines for which he does not propose to pay a fair price? Can he reasonably expect a firm of mill-builders or machinery makers to impoverish themselves for his benefit?

JEWING-DOWN may pay in some lines of business, but any man who has studied the history of the flouring-mills built on the jew-down plan will soon come to the conclusion that mill-building is not one of those lines. I have yet to see a successful mill of moderate cost and capacity on which the builders and furnishers lost money. Wherever the owner claims great saving by the simple process of chopping off a part of the contract figures, he will be found grumbling that his plant is not satisfactory.

THE moral is this: When you go to build, do not start in

with the ideas that the builders and furnishers will rob you, that they are not entitled to a fair return on their job, and that they will in some way give you a good deal for little or nothing. You intend to grind for profit, and you should not forget that others work for a profit. Be willing to pay a fair price for good work, and you will get a good mill. Never forget that, for every necessary dollar knocked off first cost by the sledge-hammer process and the jew-down spirit, you will be called to spend many other good dollars to secure good work. Generally the dollars supposed to be saved in the way referred to are in reality lost, because a poor plant means loss of power, extra expense for repairs and poor output in both quality and quantity. Practice economic liberality, or liberal economy, whichever way you prefer to call it, and always be willing to pay for what you wish to get.

COIN VALUES FOR 1890.

The Director of the United States Mint has estimated, and the Secretary of the United States Treasury has proclaimed, the values of the standard coins of the nations of the world, to be followed in determining the value of all foreign merchandise imported into this country after January 1, 1890, as exhibited in the following table:

Country.	Monetary Unit.	Value in terms of U. S. Gold Dollar.
Argentine Republic.....	Peso.....	\$0.965
Austria-Hungary.....	Florin.....	0.345
Belgium.....	Franc.....	0.193
Bolivia.....	Boliviana.....	0.698
Brazil.....	Milreis.....	0.546
British possessions N. A. (except Newfoundland).....	Dollar.....	1.00
Costa Rica, Guatemala, Honduras, Nicaragua, San Salvador.....	Peso.....	0.698
Chili.....	Peso.....	0.912
China.....	Tael, Shanghai.....	1.031
China.....	Tael, Haikwan (customs).....	1.148
Colombia.....	Peso.....	0.698
Cuba.....	Peso.....	0.926
Denmark.....	Crown.....	0.268
Ecuador.....	Suere.....	0.698
Egypt.....	Pound (100 piastres).....	4.943
France.....	Franc.....	0.193
German Empire.....	Mark.....	0.238
Great Britain.....	Pound sterling.....	4.866½
Greece.....	Drachma.....	0.193
Hayti.....	Gouree.....	0.965
India.....	Rupce.....	0.332
Italy.....	Lira.....	0.193
Japan.....	Yen, gold.....	0.997
Japan.....	Yen, silver.....	0.752
Liberia.....	Dollar.....	1.00
Mexico.....	Dollar.....	0.758
Netherlands.....	Florin.....	0.402
Newfoundland.....	Dollar.....	1.014
Norway.....	Crown.....	0.268
Peru.....	Sol.....	0.698
Portugal.....	Milreis.....	1.08
Russia.....	Rouble.....	0.558
Spain.....	Peseta.....	0.193
Sweden.....	Crown.....	0.268
Switzerland.....	Franc.....	0.193
Tripoli.....	Mahhub of 20 piastres.....	0.629
Turkey.....	Piastre.....	0.044
Venezuela.....	Bolivar.....	0.14

The values of the following coins have been changed since January 1, 1889: florin of Austria, silver dollar of Bolivia, Colombia, Ecuador, Peru and the Central American States, bolivar of Venezuela, rupee of India, silver yen (or dollar) of Japan, dollar (or peso) of Mexico, rouble of Russia, mahhub of Tripoli. The following coins have for the first time been included in the circular of January 1: \$2 gold piece of Newfoundland, value \$2.027; shanghai tael of china, value \$1.031; haikwan (customs) tael of China, value \$1.148. The circular of January 1, 1890, marks an important change, in that the values of the silver coins are higher than for the preceding year, whereas, since 1879 the values of foreign coins have each year been estimated lower than for the preceding year.

MEETING OF MICHIGAN MILLERS.

The regular annual meeting of the Michigan Millers' State Association was held at the Hotel Downey, in Lansing, on the 8th of January. The meeting was called to order by the President, D. B. Merrill, at 1.30 p. m. M. A. Reynolds was chosen Secretary of the meeting. Owing to the absence of the records the minutes of the last meeting were not read. The following members were in attendance: D. B. Merrill, Kalamazoo; W. A. Coombs, Coldwater; W. B. Knickerbocker, Albion; Geo. H. Doan, Holly; J. P. Newman,

Portland; C. G. A. Voigt, Grand Rapids; H. L. Pierson, Flint; E. A. Pomeroy, Jonesville; Geo. W. Jenks, Sand Beach; E. Thoman, Lansing; A. N. Hart, Lansing; E. E. Chappell, Belding; Richard Dawson, Pontiac; Chas. Applett, Detroit; C. J. DeRoo, Holland; R. T. French, Middleville; N. B. Rice, Portland; J. H. Seaver, Ithaca; M. A. Reynolds, Stanton.

After some informal discussion a new constitution and by-laws was read by M. A. Reynolds, and the advisability of making a new departure in association work was dwelt upon. W. A. Coombs, of Coldwater, moved the adoption of the constitution and by-laws as read, which motion was supported. After considerable discussion, lasting an hour or more, the motion was put and lost by a large majority. It was moved by Mr. Coombs that a \$10 assessment be made for current expenses. The motion prevailed and the assessment for current expenses of ten dollars upon each member was ordered made by the Secretary.

W. B. Knickerbocker offered a resolution that the action of the Minneapolis grain paper in regard to the tricky dealing practiced on the Richmond market be and is endorsed by the Michigan Millers' Association. The resolution was adopted by a rising vote, every member voting for it.

It was moved by Mr. DeRoo that a committee of three be appointed by the chair to lay out a line of work for the Association for the year, which motion prevailed, and the chair appointed as such committee Messrs. DeRoo, Coombs and Knickerbocker. It was moved by Mr. Jenks that a committee of three be appointed by the chair to recommend officers of the Association for the ensuing year, which motion prevailed, and the chair named Messrs. Jenks, Newman and Thoman as such committee. A recess of half an hour was taken.

Upon reassembling the committee to select officers for the Association reported through their chairman, Mr. Jenks, as follows: For President, W. B. Knickerbocker; for vice-President, C. J. DeRoo; for Secretary and Treasurer, M. A. Reynolds. The Executive Committee to be composed of the President, Vice-President and W. A. Coombs, E. E. Chappell and W. N. Rowe. The report of the committee was accepted and the Secretary was instructed to cast the vote of the Association for the committee nominees.

Mr. Chappell offered the following resolution, which was unanimously adopted: *Resolved*: That the hearty thanks of this Association is hereby tendered to Mr. D. B. Merrill and Mr. C. G. A. Voigt, our retiring President and Vice-President, for their long and willing service rendered this organization in the past.

The committee recommend a line of work for the Association for the ensuing year reported in writing through its Chairman, Mr. Coombs, as follows: We, the committee, recommend that the Association pay the secretary the sum of \$200 per year and necessary traveling expenses, that he shall work for the best interests of the Association as directed by the executive committee and according to his best judgment. As one special feature of his work he shall furnish members the names of all parties who are reported tricky and unbusinesslike in their deal.

W. A. COOMBS,
(Signed,) W. B. KNICKERBOCKER,
C. J. DE ROO.

Mr. Thoman moved an amendment to the report, making the secretary's salary \$300 and necessary traveling expenses, which motion prevailed. The report of the committee as amended was then accepted and adopted and the committee discharged. There being no further business the meeting adjourned.

COTEMPORARY COMMENT.

Of this buyers may be assured. Cash wheat in the northwest must decline, or flour can not be supplied from it at lower prices than it is selling at. There is even talk by many millers that if flour would not harden they would have to shut down their mills. Some northwestern mills are idle, for, with the relatively high cost of the wheat, they can not profitably work. Yet they are looking forward to resump-

tion at an early date under the belief that flour will improve in activity as well as harden in values.—*Minneapolis "Market Record."*

It is not within the possibilities for the mill and miller to be good enough to make good flour out of poor stock. To make white flour out of yellow-meated wheat, strong flour out of weak wheat, or sound flour out of damaged wheat, grind each separately, and the products of the best mill commanded by the best miller will be irregular; but mix them judiciously and the flour product will have at least one market merit, that of regularity. Without regularity there is no such thing as good milling conduct.—*St. Louis "Miller."*

THE CANADIAN MILLERS AROUSED.

Referring to the subject of inequitable grain and flour duties levied in Canada, the Toronto, Ontario, "Electrical, Mechanical and Milling News" of January says: The milling situation, so far as the prospects of a readjustment of the flour duties are concerned, appears to have improved very much during the last two or three weeks. The agitation for a readjustment of duties has been taken up with true western energy by the Winnipeg Grain Exchange and Board of Trade. The former has addressed circulars to every municipal council in the Northwest, asking that petitions be forwarded to the Government in favor of equalizing the duties on flour and wheat. This circular says: "The Government positively refuses to reduce the import duty on wheat, and we are compelled as free-traders or protectionists to insist that the duty on flour should be at least equal to that imposed on the raw material. The present absurd and illogical state of the tariff on wheat and flour is fast closing up Canadian mills. As the Manitoba farmer gets his best prices for wheat to be ground in Canadian mills, it is directly to his interest to have as many of them in operation as possible." The circular intimates that it is the intention to send a deputation representing Northwest grain and flour interests to Ottawa on this subject.

What are the millers and farmers of Ontario doing in this matter? Not all, we fear, that they might do, were they fully alive to their own interests. While several of the Farmers' Institutes have been brought to see the advantage of supporting the millers in their demands for justice, others have shown themselves to be either remarkably obtuse or willing to sacrifice personal interest rather than appear to support a trade policy which they have always been in opposition to. The resolution passed by the Winnipeg Board of trade clearly shows that the question of free trade versus protection, *per se*, is not involved in the present demand for an increase the flour duties. Among those millers and farmers who are supporting this demand may be found Liberals, Conservatives, Protectionists, Free Traders and the advocates of Reciprocity. The common ground upon which they stand is, that so long as the policy of protection to home industries shall be declared to be the trade policy of this country, protection should be accorded the various industries of the country in equal degree. The important industry of milling alone should not be left unprotected, and in no instance should the raw material entering into the manufacture of an article be charged a higher duty than the manufactured article itself. Here is a platform upon which all may and should stand. So broad and logical are the premises laid down, that on the many occasions when it has been presented to the Government, there was absolutely no defense to be made against it. We trust that every effort will be made to show the farmers the identity of their interest with that of the millers in this agitation.

CANADIAN PACIFIC DISCRIMINATIONS.

Canadian wheat-growers evidently have a decided grievance against the Canadian Pacific Railway. Some of the discriminations practiced by that road against Canadian farmers in Manitoba, and in favor of the farmers in Dakota and Minnesota, are set forth by the Toronto "Mail" as follows:

From Hutchinson, Minn., 70 miles from Minneapolis, to Chicago the through wheat rate is 18½ cents per 100, or 11.1

cents per bushel. From Chicago to New York the rate is 25 cents per 100, or 15 cents per bushel. The cost of sending a bushel of wheat from Hutchinson to New York is, therefore, 26.1 cents per bushel, or nine-tenths of a cent less than the cost of conveying a bushel from Winnipeg to Toronto by the Canadian Pacific.

From Fergus Falls, Dak., 187 miles beyond Minneapolis, to Chicago the rate is 25 cents per 100, or 15 cents per bushel. Hence, the through rate from Fergus Falls to New York is 30 cents per bushel, or 8.1 cents per bushel less than the charge for carrying a bushel from Winnipeg to either of the Canadian winter ports by the Canadian Pacific.

The 25-cent per 100 rate to Chicago is granted from points further away from Minneapolis than Fergus Falls. It is granted, for instance, from Breckenridge, Dak., which is 214 miles from Minneapolis; from Watertown, Dak., 225 miles; and from Moorehead, Minn., and Fargo, Dak., respectively 241 and 242 miles from Minneapolis. That is to say, from all these points to the seaboard at New York the rate is 8.1 cents per bushel less than the rate from Winnipeg to St. John or Halifax by the Canadian Pacific.

From Huron, Dak., 295 miles from Minneapolis, the rate to Chicago is 28 cents per 100, or 16.8 cents per bushel. Adding 15 cents per bushel for the rate to New York, the gross rate from Huron to tidewater is 31.8 cents per bushel, or nearly 7 cents less than the Canadian Pacific rate per bushel from Winnipeg to St. John or Halifax.

From Ellendale, Dak., and Aberdeen, Dak., respectively 301 and 316 miles beyond Minneapolis, the through rate to Chicago is 28.5 cents per 100, or 17.1 cents per bushel, making the rate from those points to New York 32.1 cents, or 6 cents per bushel less than the Canadian Pacific rate from Winnipeg to St. John or Halifax.

P. F. Kefauver, Loudon, Tenn., has points on the new 200-barrel roller flouring-mill to be built by the Farmers' Alliance of Monroe county. A stock company is organizing, and a site will be selected at once.

A NEW METHOD OF TREATING DISEASE.

HOSPITAL REMEDIES.

What are they? There is a new departure in the treatment of disease. It consists in the collection of the specifics used by noted specialists of Europe and America, and bringing them within the reach of all. For instance the treatment pursued by special physicians who treat indigestion, stomach and liver troubles only, was obtained and prepared. The treatment of other physicians, celebrated for curing catarrh was procured, and so on till these incomparable cures now include disease of the lungs, kidneys, female weakness, rheumatism and nervous debility.

This new method of "one remedy for one disease" must appeal to the common sense of all sufferers, many of whom have experienced the ill effects, and thoroughly realize the absurdity of the claims of Patent Medicines which are guaranteed to cure every ill out of a single bottle, and the use of which, as statistics prove, has ruined more stomachs than alcohol. A circular describing these new remedies is sent free on receipt of stamp to pay postage by Hospital Remedy Company, Toronto, Canada, sole proprietors.

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Do not order your cloth until you have conferred with us. It will pay you, both in point of quality and price. We are prepared with special facilities for this work. Write us before you order.

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N. B.—All Mill Picks ground and ready for use (both old and new) before leaving the shop. No time and money lost grinding rough and newly dressed Picks. All come to hand ready for use.

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GENERAL NOTES.

THE smallest republic in the world is the little hamlet of Geust in the Pyrenees. Its inhabitants number only 125, and every member in the community has a share in making its laws.

THE money in actual circulation in the United States October 1, 1889, was as follows: Gold coin \$375,947,715; standard silver dollars \$57,554,100; subsidiary silver \$52,931,352; gold certificates \$116,675,349; silver certificates \$276,619,715; United States notes \$325,510,578; national bank notes \$199,779,011; total \$1,405,017,820.

MILLING PATENTS.

Among the patents issued January 7, 1890, are the following:

Humphrey Roberts, jr., Waterman, Ill., No. 418,751, a grain loader and weigher.

Peleg Barker, Kearney, Neb., No. 418,780, a grain-meter.

John Henry, Ardoch, Dakota, No. 418,795, a grain-meter.

Lloyd C. Dibert, San Francisco, Cal., No. 418,865, an oat-huller, consisting of the combination of the runner, the bed-stone and the mechanism for adjusting and leveling the bed-stone, consisting of the screw seated in lugs or ears on the bed-stone, the fixed brackets, the supporting-screws seated in the brackets and fitted into the heads of the leveling-screws, the sprocket-wheels on said supporting-screws, the endless chain engaging said wheels, the shaft supported by the bed-stone, and gearing connecting said shaft with one of the supporting-screws, together with the combination of the vertical series of runners, the central spindle by which they are carried and operated, and mechanism for vertically moving the spindle, whereby all the runners of the series are adjusted simultaneously, the series of bed-stones, one for each runner, said stones having the lugs or ears, the leveling-screws seated in said lugs or ears, the fixed brackets, the supporting screws seated therein and fitted into the heads of the leveling-screws, the sprocket-wheels on the supporting-screws, the series of endless chains passing about said wheels, the separate shafts carried by the bed-stones, and gearing connecting a shaft with one of the screws

of each set, whereby each bed-stone may be separately and independently adjusted.

Wm. A. Lorenz, Hartford, Conn., No. 418,919, a paper flour-sack.

Louis Wagner, Baltimore, Md., No. 419,162, a safety device for grain-mills, one-half assigned to John Marr, of the same place. This device consists of: 1. The combination of a grain-mill funnel, a conduit leading from the funnel and having an enlargement and an inverted shoulder, and a balanced cut-off cylinder movable up and down in said conduit above the enlargement and having at one end a bottom and side discharge ports in the walls close to the bottom. 2. The combination of a grain-mill ground-grain conduit having a valve-seat, a plug-valve having a vertical movement, a pivoted supporting-lever, having one end attached to said plug-valve, a vent-flue connected with the conduit, and a flap-valve to close said flue and provided with an arm to come in frictional contact with the free end of the said supporting-lever. 3. The combination of a grain-mill funnel, a conduit leading from the funnel, a cut-off cylinder movable up and down in said conduit, a beam pivoted to the side of the funnel and having one end within and the other end outside of the funnel, a hanger-rod connecting the cut-off cylinder with the inner end of the beam, a vertically-movable valve provided with a tubular neck, through which the said hanger-rod passes loosely, a pivoted supporting-lever having one end attached to said valve, and an arm to come in frictional contact with the free end of the said supporting-lever.

What has become of the Millers' National Association of the United States of America? Has it suicided, homicided or coincided? Is it alive, or dead? Is it kicking, or kicked? —THE MILLING WORLD. In persistently following the worthy lead of its official organ, the foot-prints laid down by the Big 4 and the asinine tow-line of its latest secretary, along with the aid of a Big 5 pedal, it has neither suicided, homicided nor coincided, but has, while kicking, been kicked —secretaricided—so to speak. And gone with McGinty to the bottom of the sea-y! Has the great and glorious M. N. A. —St. Louis "Miller."

One of the neatest and most attractive calendars for 1890 is that issued by C. I. Hood & Co., of Lowell, Mass. It is a work of art throughout. Send for copies. It illustrates by appropriate pictorial representation the effects of Hood's Sarsaparilla on the human race. The calendar costs 15 cents, and 2 will be sent to applicants for 25 cents.

CATARRH.

CATARRHAL DEAFNESS—HAY FEVER.

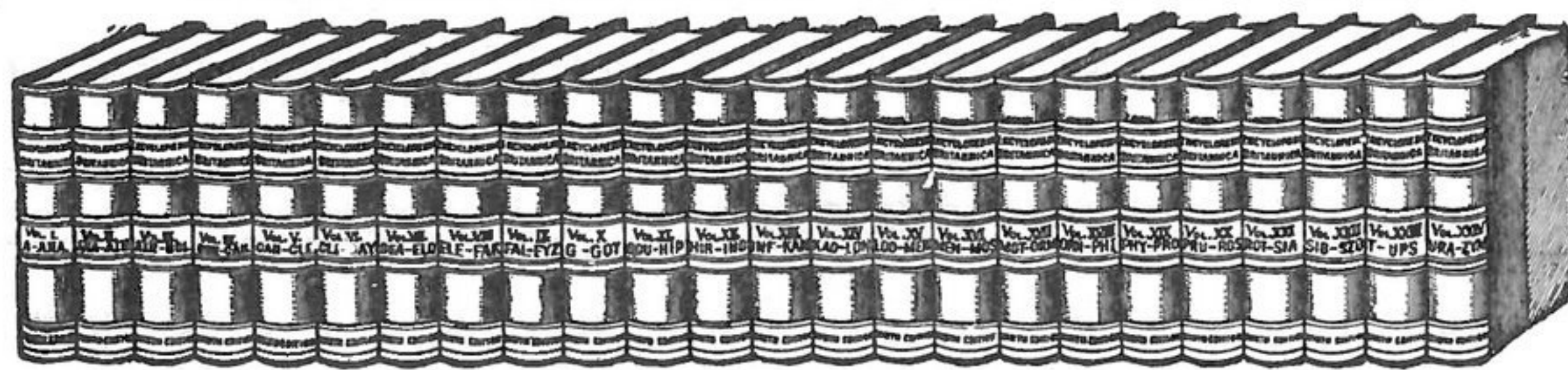
A NEW HOME TREATMENT.

Sufferers are not generally aware that these diseases are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, however, has proved this to be a fact, and the result of this discovery is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are permanently cured in from one to three simple applications made at home by the patient once in two weeks.

N. B.—This treatment is not a snuff or an ointment; both have been discarded by reputable physicians as injurious. A pamphlet explaining this new treatment is sent free on receipt of stamp to pay postage, by A. H. Dixon & Son, 337 and 339 West King street, Toronto, Canada.—*Christian Advocate.*

Sufferers from Catarrhal troubles should carefully read the above.

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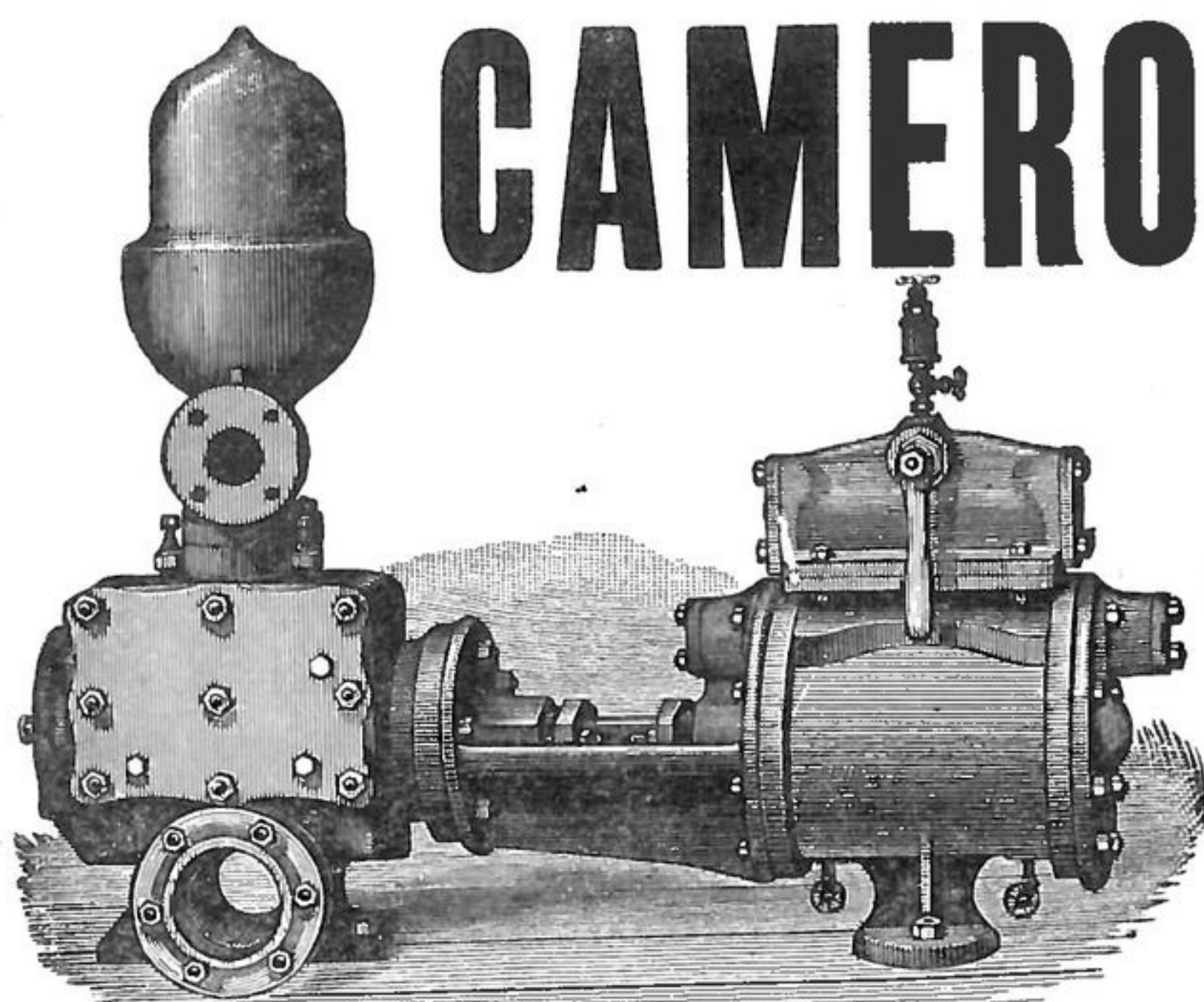
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Philadelphia,	608 Chestnut St.	M. R. Muckle, Jr. & Co.
St. Louis,	302, 304 Washington Av.	Fairbanks & Co.
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Denver,	1330 Seventeenth St.	
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Charlotte, N. C.	36 College St.	The D. A. Tompkins Co.
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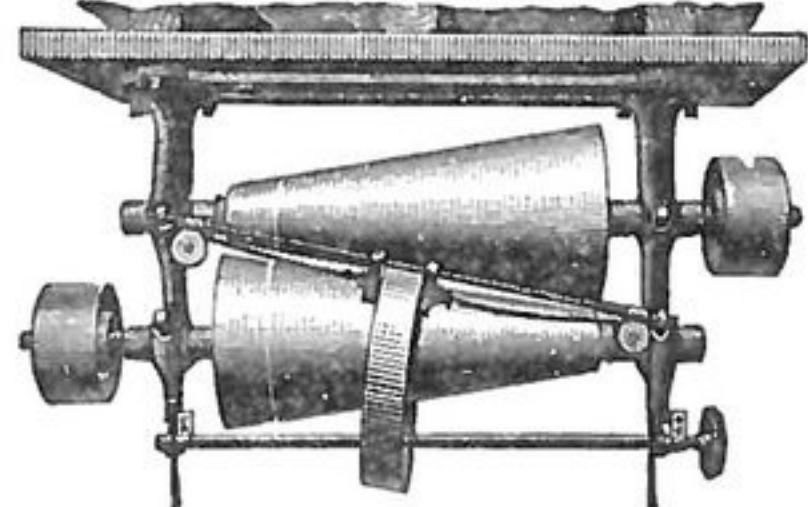
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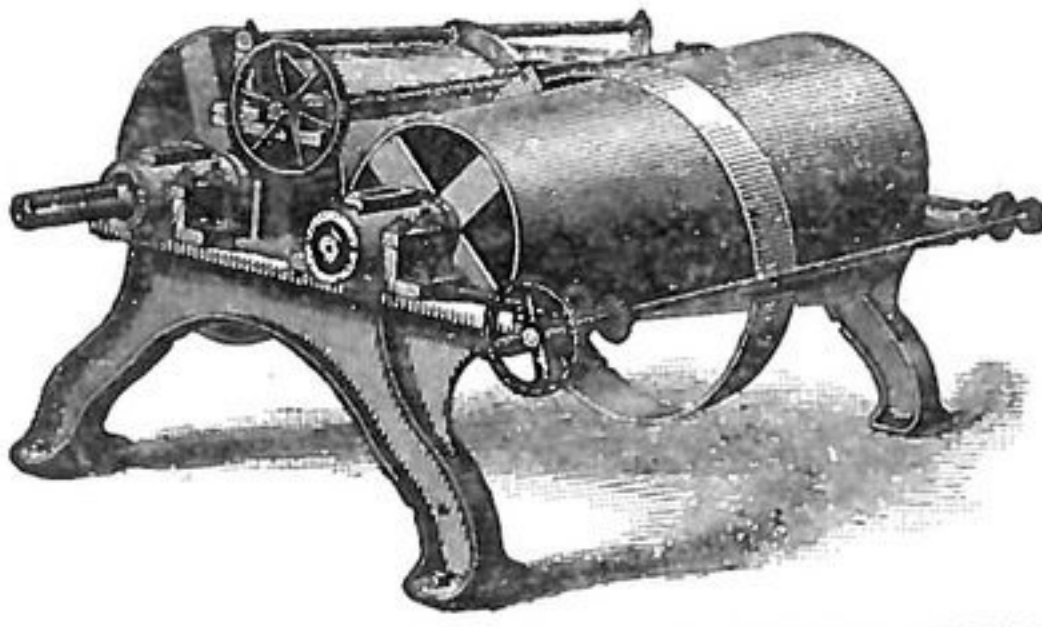
Foot of East 28d Street. - New York.

THE EVANS FRICTION CONE & FRICTIONAL GEARING

"PATENTED."



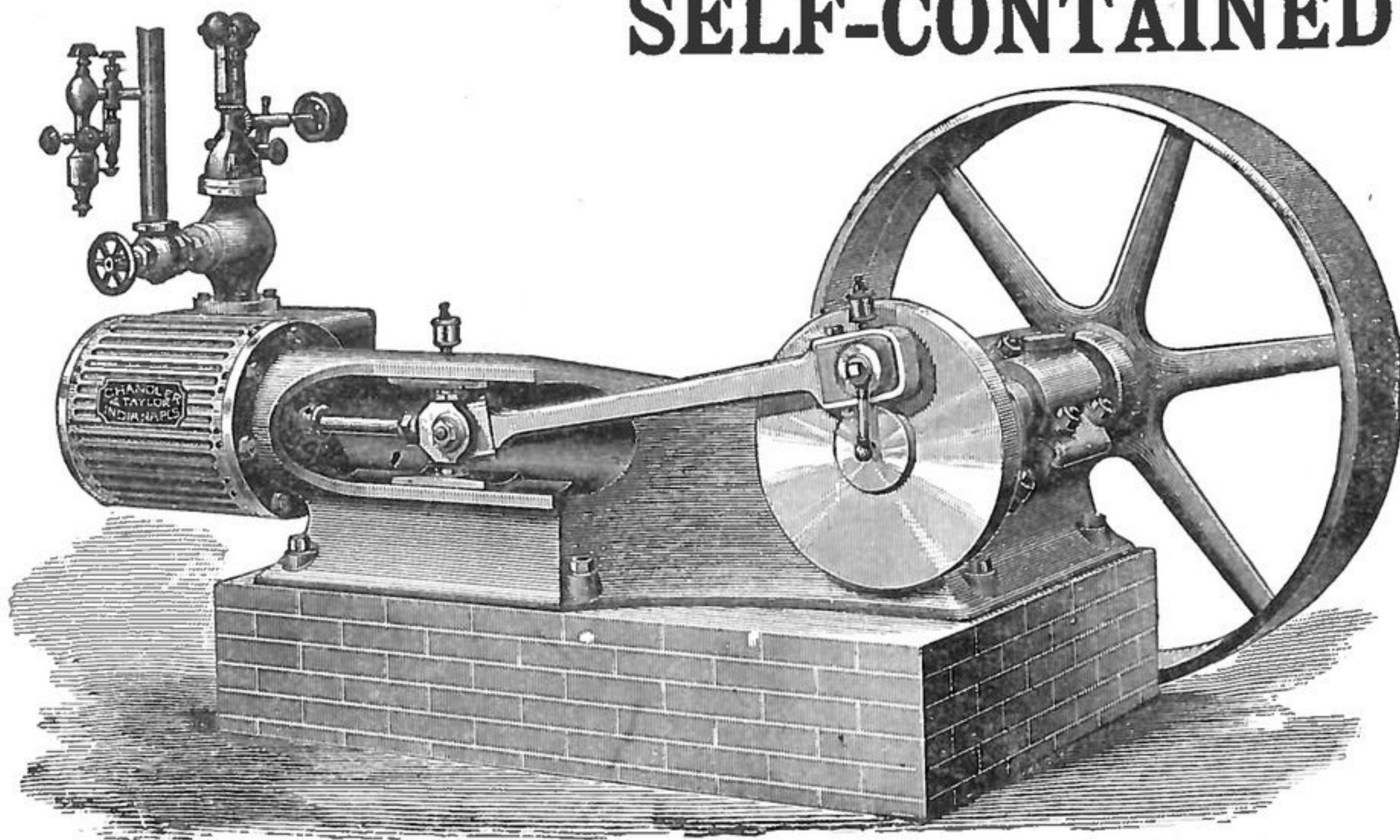
This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is



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 G. Martin's grist-mill, Huntsville, Ala., burned.
 H. L. Morton, Addison, Ky., builds a roller mill.
 D. Levi, Moundsville, W. Va., builds a flour-mill.
 The Hollins Flour Mill, Lynchburg, Va., is being refitted.
 The Murphytown Mill Co., Murphy's Mills, W. Va., have refitted their flouring-mill.

G. W. Belknap, Nashville, Tenn., builds a 50-barrel roller flour-mill at Stateville, Tenn.

Rogan & Lambertson, Santa Anna, Tex., want machinery for a new 75-barrel roller flouring mill.

T. C. Cothern and others, Lubeck, W. Va., have formed a stock company and are building a roller flouring-mill.

The secretary of the board of trade, Vernon, Tex., has information concerning a projected flouring-mill and grain-elevator at that place.

C. N. Brooks and others, Hillsboro, Tex., have incorporated the Hillsboro Roller Mill Co., capital stock \$30,000, to build a large flouring-mill; machinery is wanted.

W. T. Farrar and English capitalists are building a flour and grist mill at Read's Mill, Ala.; they will make application to change the name of the town to Gladstone.

Messrs. James Leffel & Company, Springfield, O., manufacturers of the celebrated "Old Reliable" water wheels and superior steam engines and boilers, have enjoyed a very fine trade throughout the season of 1889 and carry many orders over for the new year. They are now running their works until ten o'clock at night in order to meet the steadily increasing demand for the specialties.

The National Pulley Covering Co., of Baltimore, Md., have recently completed arrangements with Ellett & Cooke, of Richmond, Va., for the exclusive sale of their goods in Virginia and North Carolina, to whom all inquiries from that section should be sent. The December business of this company came from 21 states and Canada, a showing extremely gratifying to them and warranted by the merits of their goods.

It is rumored that the negotiations for the sale of the Angus Smith elevators at Milwaukee are about to fall through, not because the books of the company do not make a favorable showing, but because the Englishmen who were to handle the properties have not been able to complete the sale of some others they have on their hands. So far, although English syndicates have been negotiating for elevators in this country for more than a year, only one system of elevators has changed hands. That one is what is known as the Van Dusen system.

An Odessa, Bussia, correspondent wrote in December: "With only a slight sprinkling of snow, which fell a fortnight ago, the rigor of winter is now upon us in its most unacceptable form for agriculturists, that is, in the shape of a sharp blighting frost. Without their usual protection by the deep lying snows the winter crops must perish. Unless the present intense frost again moderates, the usual snowfall, which comes at the earliest approach of the winter, is impossible. It is extremely seldom that our southern provinces are subjected to the blighting effects of a snowless winter, and it will be readily understood that in a province where the raising of cereal crops is the chief industry, the present aspect is a matter of serious popular anxiety."

Says the Montreal, Canada, *Trade Bulletin*: It is now clearly evident that Canada will have none too much wheat for her own consumption during the present season, and hence the late upward tendency of prices for Canadian wheat, in contradistinction from the easier tone of the American markets, for while Manitoba wheat has lately advanced 14@15 cents per bushel, the price of Chicago No. 2 spring has shown an actual decline. The crop of winter wheat in Ontario and hard spring wheat in Manitoba has fallen vastly below the roseate estimates at first issued,

and it is now feared by some that Manitoba and Ontario millers will not have sufficient wheat to supply the wants of their home customers, although others think that this is too extreme a view to take of the shortage, and that it will be found that farmers have been induced to hold on to their grain in anticipation of still higher prices.

A Baltimore, Md., dispatch of January 13 says: The Northern Central railroad elevator No. 3 at Lower Canton, this city, was burned to-night. The elevator was worth \$300,000, and the loss on the corn stored there is \$280,000. The corn was owned by individual shippers. The property was well insured. Notwithstanding great shipments there are 1,400,000 bushels of grain in Baltimore elevators, and the loss of this elevator is an irreparable calamity to the exporters, as there are no facilities now to lessen the glut in the grain trade. The elevator was turned over to the Baltimore Elevator Company recently, and the loss falls on that company. The British steamship "Sacrobasco," lying near the wharf, was consumed by flames from the burning elevator. The British steamers "North Erin" and "Rhio" had their masts and rigging and some of the upper work destroyed. Three of the crew of the "Sacrobasco" are missing and it is believed they were burned to death.

Says the New York *Tribune* of January 11: John W. Dwight returned the other day from his ranch in North Dakota, where he has been for the last two months. In reference to the suffering among the people there in consequence of the light crops of the last two seasons, he said: "There have been a great many wild stories circulated and a great deal of exaggeration indulged in by some newspaper correspondents. But the fact remains that between 3,000 and 4,000 people need help. They are for the most part in Ramsey County. They are getting aid from the state, from the railway companies, from the grain elevator people and from cities like St. Paul and Minneapolis, whose citizens have given liberally. There is need, however, for more money, food and clothing. All contributions may be sent to Mr. Helgeson, Secretary of the State at Grand Forks." Ramsey County, the district in which the most suffering exists, is ordinarily one of the most fertile grain-producing counties of the state. In 1887, the last good year, it raised about 1,700,000 bushels of wheat. In 1888 the yield fell off to a little over 300,000 bushels, and last year it went down to 170,000 bushels. "So you see," added Mr. Dwight, "it is a case of one disaster following immediately upon another and the fault is not due to the people. Seed wheat is the thing they need greatly and they haven't the money to buy it."

A GREAT BUSINESS EMBARRASSED.

The trade will read with surprise and regret the following announcement sent out from Jackson, Mich., under date of January 14: The Smith Middlings Purifier Company, organized here three weeks ago, were yesterday confronted by claims from the Preston National Bank of Detroit amounting to \$150,000. These were contracted by George T. Smith in July last. The claim is a bill of sale of accounts receivable and decidedly sweeping in its wording. The new company refused to pay the claim when presented. The company gives its liabilities to the press as \$484,000, and its assets as \$500,000. The company, which succeeded the George T. Smith Middlings Purifier Company, assigned on the 14th to R. H. Emerson and Z. C. Eldred. We regret this embarrassment and hope to see the great concern on its feet again in a short time.

In the *Transatlantic* for January 15 the following authors are represented: Jules Simon, one of the Forty Immortals; Carl Vogt, the celebrated German biologist; Georg Brandes, among the foremost of Scandinavian critics; Alexandre Dumas, famous son of a famous father; Guy de Maupassant, the acknowledged master in the difficult art of telling a short story; the late Emile Augier, for whose seat in the French Academy the leading litterateurs of France are competing; Henry Maret and Tony Revillon, notable in French journalism and members of the Chamber of Deputies; Henrik Ibsen, the reigning sensation of the entire literary world; Felix Pyat, whose "Rag-picker of Paris" was perhaps the greatest success that the French stage has known; and Charles Gounod, in the front rank of the musical composers of this epoch. 327 Washington street, Boston. \$2.00 a year.



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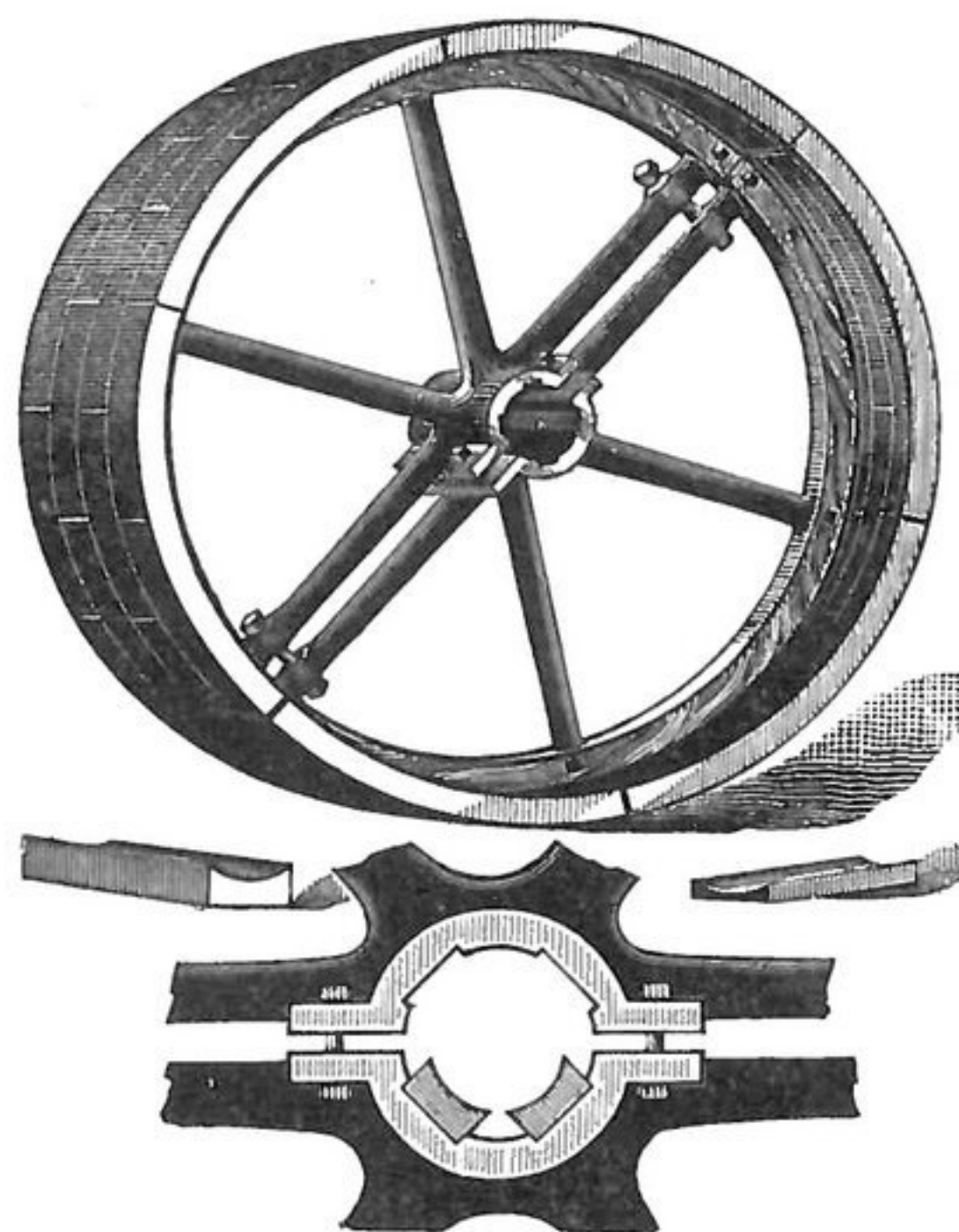
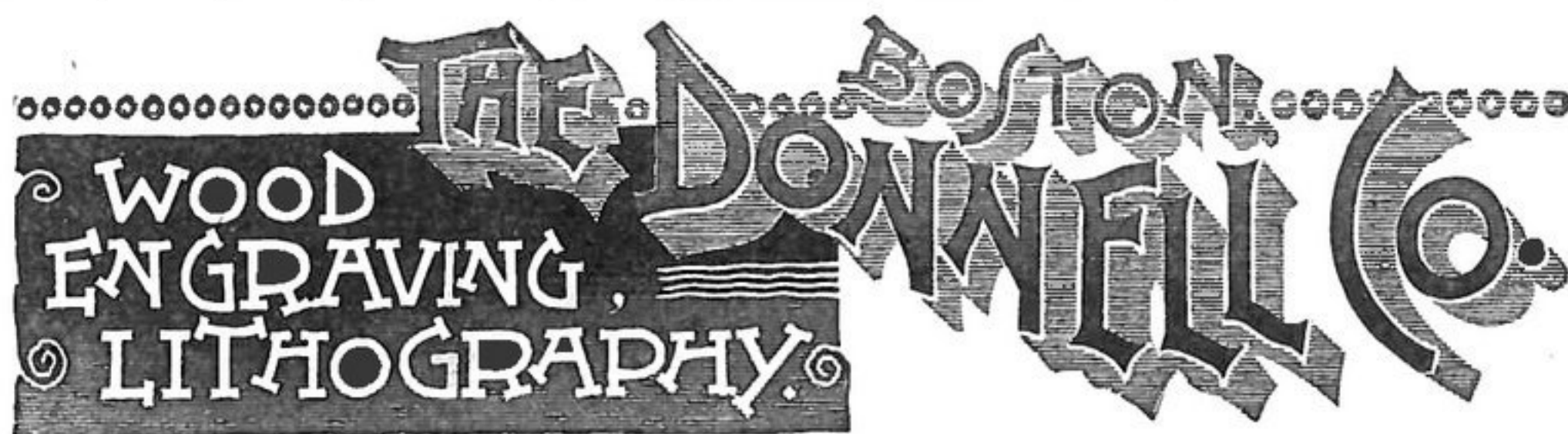


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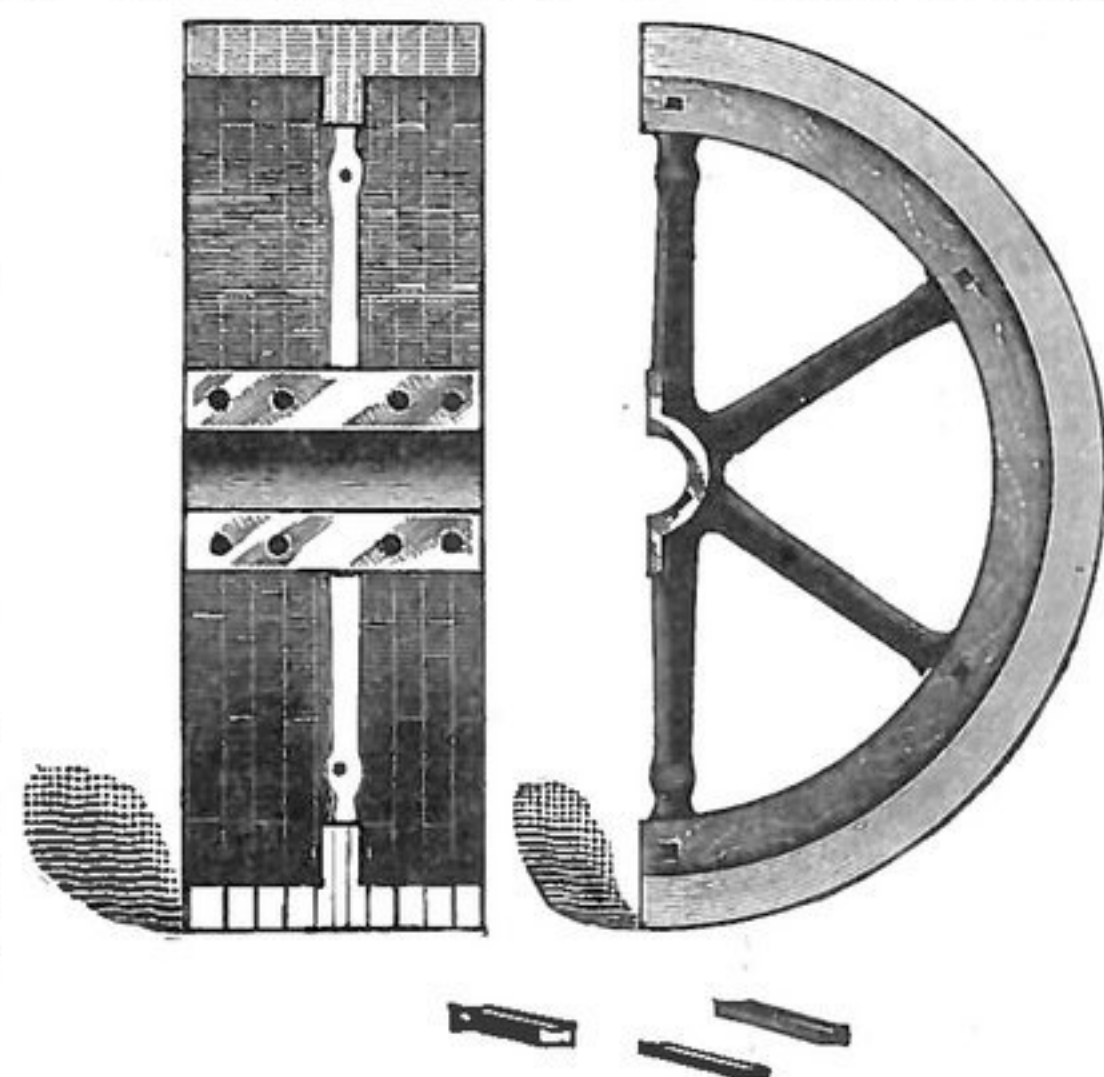
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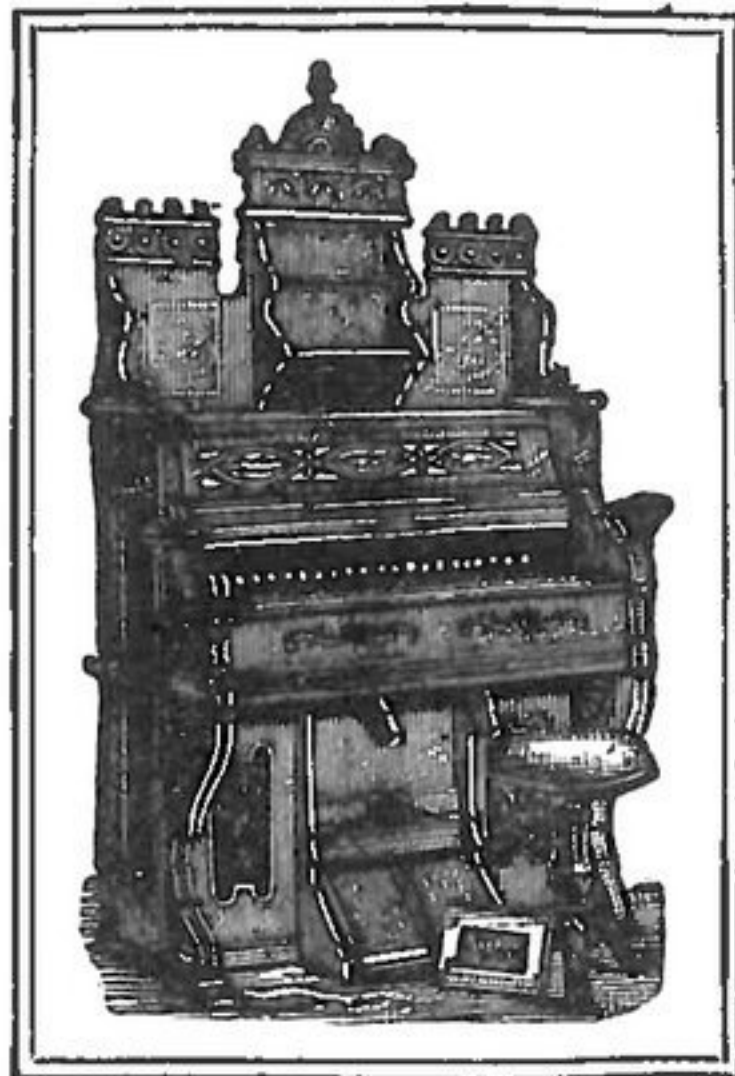
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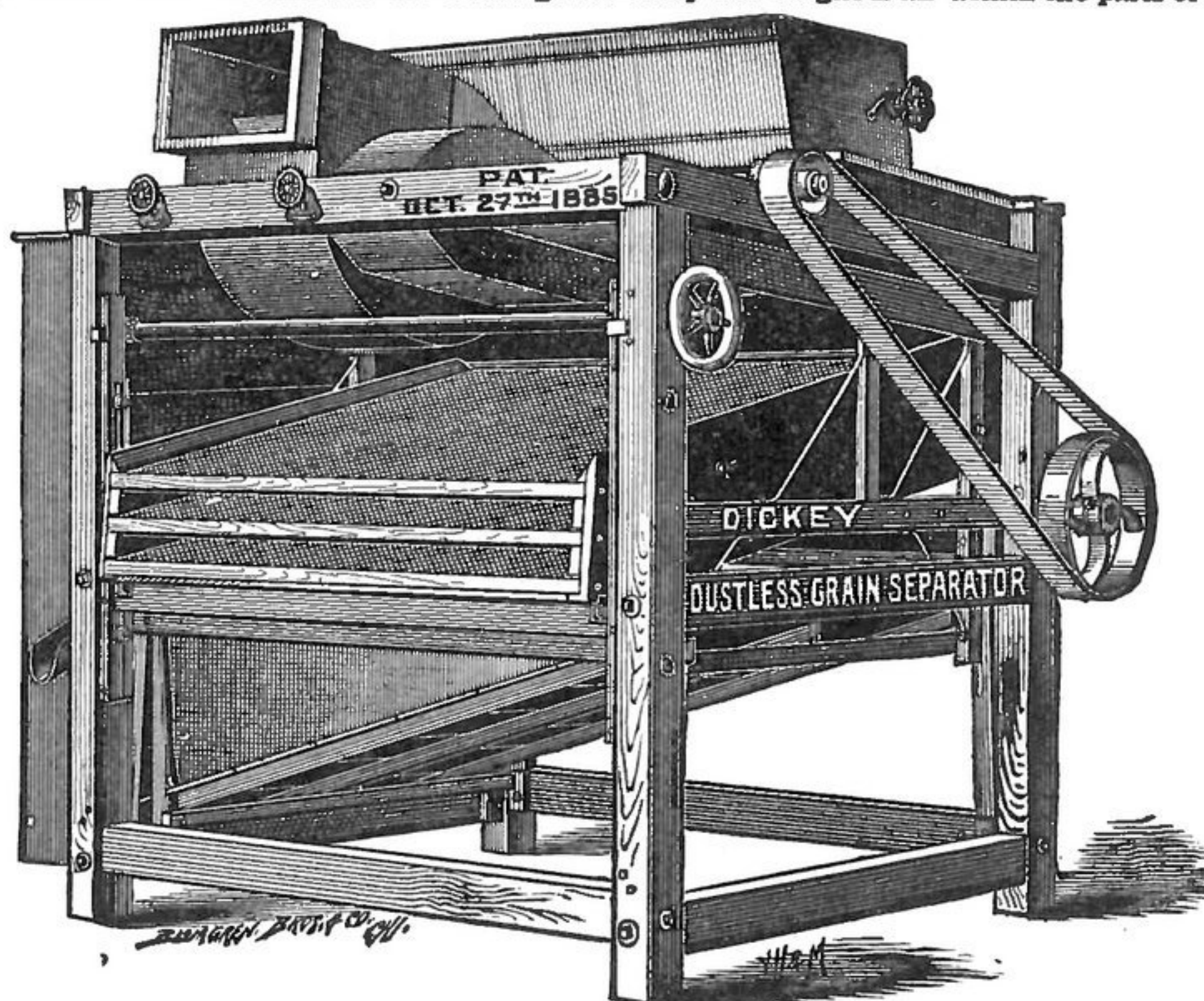
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EUROPEAN ECHOES.

MESSRS. Borrowman, Phillipps & Co., of 41 Seething Lane, London, E. C., send out under date of December 31, 1889, the following communication to the flour trade: "We beg to inform you that the partnership which has existed between us for 28 years has been dissolved by effluxion of time, and that Mr. Borrowman this day retires from the business. The firm will in future be carried on by Mr. Phillipps under the same style as heretofore for his sole account, and he will liquidate all outstanding accounts of the old firm."

At a general meeting of the shareholders of the Rio de Janeiro Flour Mills and Granaries, Limited, held in London, England, December 23, 1889, Secretary Joseph Bulkley read the following report: "With regard to the loss of £8,771 shown by the trading or profit and loss account, I must explain that, had the works been handed over to us complete and in good working order on November 30 of last year, as they ought to have been, the accounts presented would have been very different, and the nine months' work, instead of showing a loss, would have yielded a considerable profit. In the first place, we could not begin milling on the company's account till January 23, owing to a breakdown of the engines; so while salaries, wages and other expenses were mounting up, no profit was being made during the seven or eight weeks the mill was idle. Then the wheat in store, between 4,000 and 5,000 tons, required constant turning over in order to prevent serious loss from heating and weevil, and this entailed very considerable expense. Another trouble was the backward state of the elevator, which was not ready for trial till the latter part of June, and was then in a most unsatisfactory condition. This caused us a very heavy extra expense in discharging our wheat cargoes. The directors have endeavored to arrive at a settlement of the company's claims against the contractor for the losses incurred through his delay, but, not having been successful, there is no option but to refer all matters in dispute to arbitration, this being the course provided by the contract. I ought to add that the securities forming the retention fund held by the board as a guarantee for the contract being properly fulfilled are of the value of £20,000. Our flour, gentlemen, has from the very commencement been of very superior quality. We had our different makes analyzed by Professor Jago, who is a great authority in the flour trade, and he reports most favorably of them. Still, gentlemen, it takes time to get our flour known among the Brazilian flour-bakers and merchants as it ought to be. Our people at Rio are doing their best to accomplish this; they sent a sample of our flour to the Paris exhibition, where a gold medal was awarded for its excellence, and this, doubtless, will be a great help in making the quality of our flour more widely known and appreciated. You will bear in mind that the directors have the power of raising the sum £100,000 by the issue of debentures or debenture stock. As the business of the company increases, they have, of course, to make larger purchases of wheat in order to provide for the requirements of the mill, and it is probable that before long it may be desirable to issue the above amount of debentures or debenture stock. When this is done it will, in the first place, be offered to the shareholders." The chairman was also re-elected, and votes of thanks passed to the managers and employees of the mill.

Writing from Duluth, Minn., under date of December 12, 1889, Mr. Gautier de Ste. Croix says in the London "Miller" concerning the prospect of American wheat: "There is no doubt whatever that the theory I have so often advanced, that it is possible to secure a pure and unadulterated supply of the wheats of this district, is perfectly practical. The conditions of monopoly, which existed and practically controlled the supply of wheat, are disappearing and being replaced by a free market, and I have met with the liberal support of farmers and their supporters, who are only too anxious to facilitate direct shipments. From time to time estimates have appeared in trade-journals of the wheat crop

in Minnesota and Dakota. Ever since the tour of inspection I made last August, I have invariably taken an optimistic view, and this on the ground that the larger counties, which have hitherto made up two-thirds of the total, had this season good crops. No doubt some smaller districts had serious cause of complaint, but this was insufficient to affect the total result, the generally accepted estimate of which is 90,000,000, against 65,000,000 to 75,000,000, the average of earlier estimates. The present stock in Duluth now reaches 4,250,000 bushels. A conservative estimate is that there still remain 6,500,000 bushels of last crop to come forward to this point on the present crop, making a total of 10,000,000 bushels that will be available for export down the lakes next spring. This is largely made up of No. 1 northern spring, most excellent milling wheat, little if at all this season inferior to No. 1 hard, which buyers who have received direct shipments readily acknowledge. The trouble has heretofore been to secure such wheats pure, the possibility of which is now clearly established as long as navigation remains open down lakes. With respect to present prospects for next crop in North Dakota and North Minnesota, I hear on all hands from friends in the country that land has been ploughed up in excellent condition, the heavy rains in the latter part of August and early September having facilitated ploughing. Moreover, several tests report rainfall to have penetrated three feet deep, and, as drought was last season the principal source of failure and alone prevented a phenomenal crop, it certainly looks like these States going into winter quarters in the best possible shape for next crop. The estimates of acreage generally point to an increase of 5 per cent. over last season's enormous return, this in spite of the largely increasing practice of summer fallowing, which is becoming more and more general, with the happiest results, it being conceded on all hands that while this reduces the acreage, where practiced, one-third, the crops on lands so farmed are doubled. This I can confirm from my own personal observation, having carefully examined last August several crops on some farms grown under this system, and compared them carefully with those cultivated on straight tillage. The contrast was remarkable. Everything therefore favors a crop next year. The production this year in considerable districts under most adverse circumstances has exceeded one-sixth of the total crop of the United States. What it will be next year if generally successful, with increased acreage and improving methods of cultivation, I fear to estimate, as I would probably be taxed with exaggeration. The great ease with which prairie lands have been acquired and the small difficulty of getting them under cultivation have induced farmers to attempt the cultivation of tracts far in excess of their power to handle, forcing them into the hands of loan agents as borrowers at ruinous rates of interest, reducing them to a general state of poverty and preventing anything like good cultivation or fair improvement of lands. The natural consequence has been to prevent anything like a fair return for the capacity of the land. There is little doubt a better state of things may soon be looked for. Dakota, being now a State of the Union, is in a position to make her voice heard, and her legitimate claims for State aid for the purposes of land improvement can not much longer be neglected. Foremost among these is the question of irrigation, which would bring about a marvelous alteration in considerable tracts, increasing output beyond imagination. The natural facilities for this are of the best kind. All over North Dakota there are natural springs easily tapped by artesian wells, providing an inexhaustible and most convenient means ready to hand, and of the most inexpensive kind. This question to-day is being agitated before Congress and appears most likely to receive early satisfaction. What the capacity of the total production of the State of Dakota will some day reach is almost impossible to realize; it would be folly to attempt an estimate."

That ever popular and always beautiful periodical, *Vicks Floral Guide*, is out for 1890. Every lover of fine flowers and every consumer of vegetables will be interested in this issue of the *Guide*, which presents an unusual array of attractive things in both the useful and the ornamental lines. Address James Vick, Seedsman, Rochester, N. Y.

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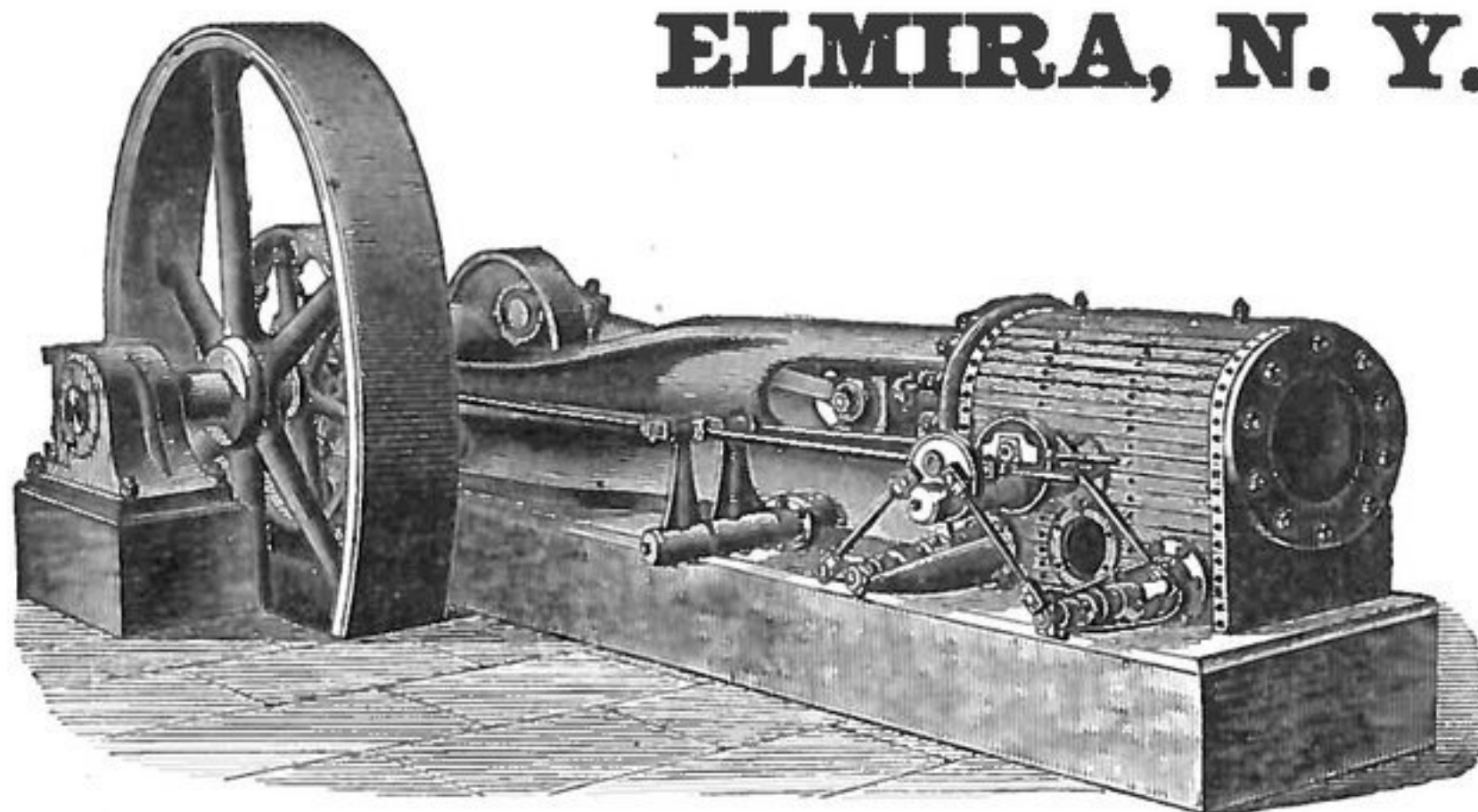
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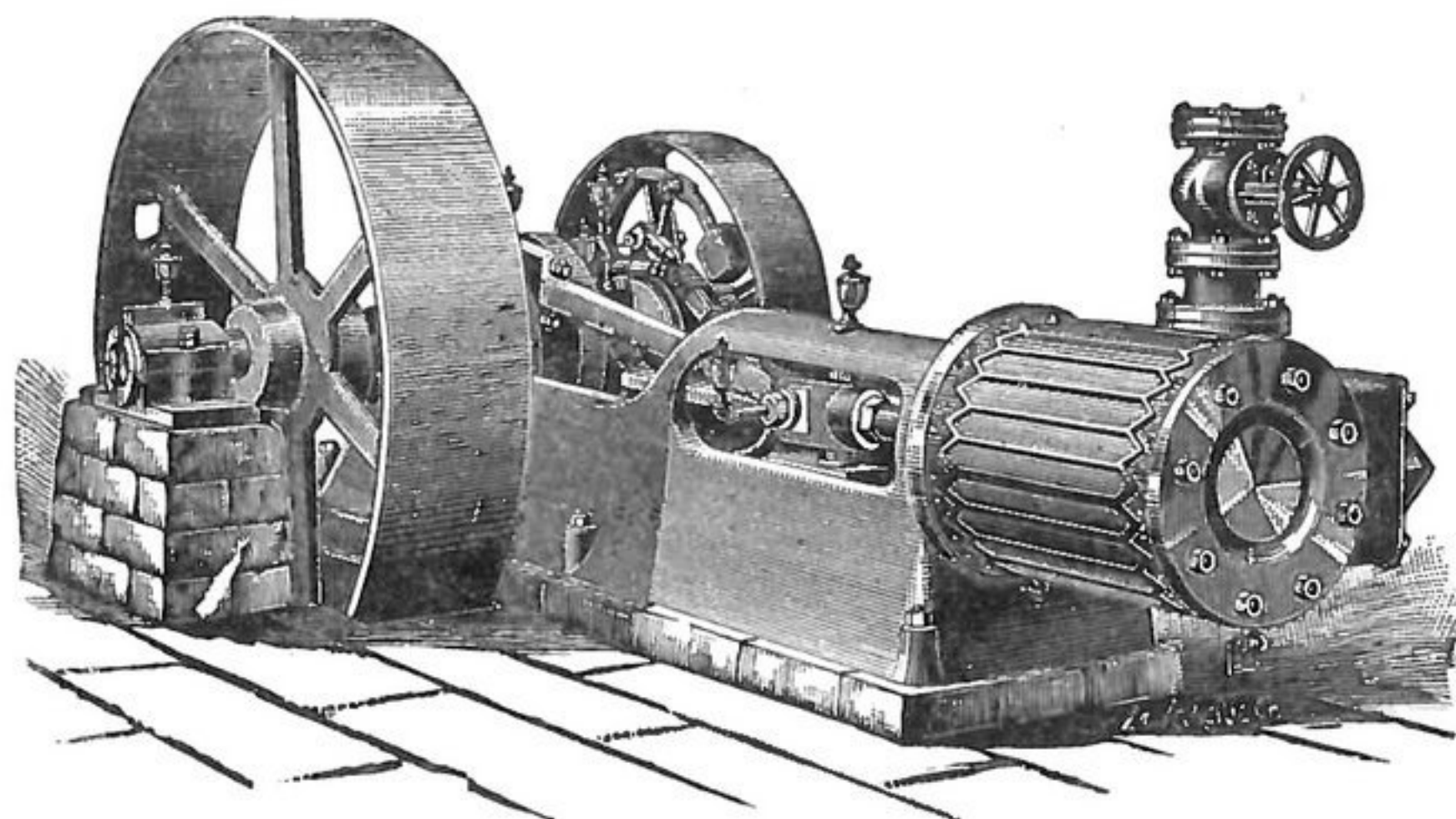
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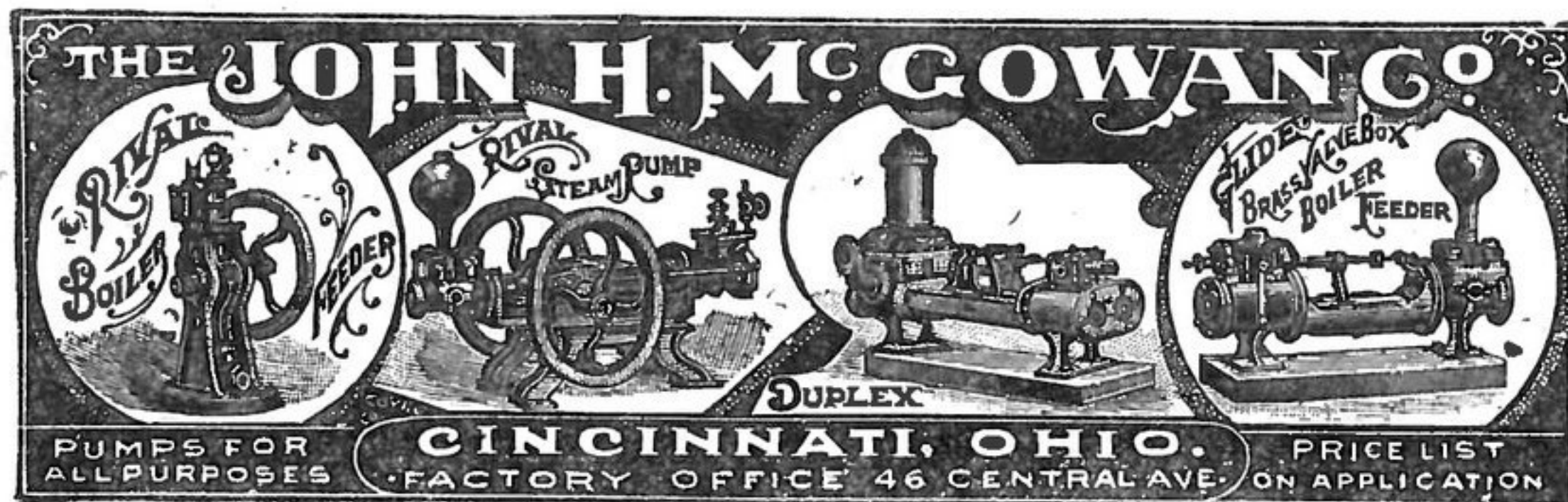
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OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., Jan. 18, 1890.

Friday of last week was a day of dull and easier wheat and flour, and stronger oats and corn markets. January wheat closed at 86½c., with Atlantic port receipts 32,812, exports 72,699, and options 1,250,000 bushels. January corn closed at 39c., with receipts 330,835, exports 347,510, and options 928,000 bushels. January oats closed at 29½c., with receipts 159,650, exports 64,960, and options 240,000 bushels. Wheat flour was dull and unchanged, with receipts 12,592 sacks and 32,266 barrels, and exports 36,850 sacks and 31,523 barrels. All the other lines were featureless.

Saturday brought better grading and movement in the West on colder weather and slack demand. January wheat closed at 86¼c., with receipts 40,430, exports 46,793, and options 224,000 bushels. January corn closed at 38½c., with receipts 250,000, exports 109,364, and options 1,300,000 bushels. January oats closed at 29½c., with receipts 159,926, and exports 103,615 bushels. Wheat flour was very dull, 5@10c. off to sell, with receipts 8,458 sacks and 27,858 barrels, and exports 7,036 sacks and 21,336 barrels. The minor lines were featureless.

Monday brought a market without news from the West, all the telegraphs being cut off by severe wind and snow storms. January wheat closed at 86½c., with receipts 26,573, exports 84,328, and options 256,000 bushels. January corn closed at 38½c., with receipts 333,617, exports 137,218, and options 320,000 bushels. January oats closed at 29½c., with receipts 171,546, exports 19,419, and options 190,000 bushels. Wheat flour was dull and lifeless, with receipts 9,969, sacks and 41,839 barrels, and exports 23,066 sacks and 1,860 barrels. All the other lines were featureless. It was reported in New York by a gentleman who recently spent a week in Chicago, that Hutchinson takes in \$2,000 to \$3,000 every night on puts and calls on the grain markets and then goes on the Board the next day and holds the market where the holders of his privileges can neither put nor call the stuff, and thus he bags the above amount from day to day and will neither let the markets go up nor down. He said that some believe that Hutchinson is doing this purposely to kill business on the Board in revenge for its suspending him a couple of years ago for trading in privileges; that he stopped the practice while his son was President of the Board so as not to embarrass him, but now he does it openly. Of course any story about Hutchinson is sure to find takers.

Tuesday brought lower and more active markets, on heavier western receipts and selling out by longs. January wheat closed at 86¼c., with receipts 26,121, exports 19,700, and options 3,000,000 bushels. January corn closed at 38½c., with receipts 455,840, exports 211,766, and options 3,250,000 bushels. January oats closed at 29½c., with receipts 159,908, exports 17,953, and options 380,000 bushels. Wheat flour was dull and flat, with cables dull and depressed, with prices tending downward, and with exporters 10c. under the New York market. Receipts were 13,988 sacks and 27,231 barrels, and exports 21,795 sacks and 12,029 barrels. The minor lines reported no changes of importance. The visible supply in the United States and Canada was:

	1890.	1889.	1888.
	Jan. 11.	Jan. 12.	Jan. 14.
Wheat.....	33,178,421	37,498,541	43,248,132
Corn.....	10,833,695	11,842,242	6,737,490
Oats.....	4,935,269	8,404,108	5,686,040
Rye.....	1,280,867	1,687,251	313,716
Barley.....	2,283,234	2,611,884	3,224,674

The following shows the amount of wheat and flour, together with the amount of corn on

passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

	1890.	1889.
	Jan. 14.	Jan. 15.
Wheat and flour, qrs....	2,125,000	2,352,000
Corn, qrs.....	400,000	300,000

The following shows the amount of wheat and corn on passage to the Continent for the past week and for the same week last year:

	1890.	1889.
	Jan. 14.	Jan. 15.
Wheat, qrs.....	419,000	358,000
Corn, qrs.....	247,000	62,000
Shipments India wheat to U. K.		70,000
do do Continent..		27,500

The imports into the United Kingdom for the past week and for the same weeks in previous years were as follows:

	1890.	1889.	1888.
	Jan. 14.	Jan. 15.	Jan. 17.
Wheat, qrs.....	258,000	295,000	151,000
Corn, qrs.....	139,000	340,000	127,000
Flour, bbls.....	166,000	85,000	267,000

Wednesday brought generally more active and lower markets. January wheat closed at 86½c., with receipts 33,468, exports 70,913, and options 2,616,000 bushels. Spot trade was dead. January corn closed at 38½c., with receipts 419,027, exports 292,478, and options 1,368,000 bushels. January oats closed at 28½c., with receipts 181,822, exports 21,644, and options 420,000 bushels. Buckwheat grain was 33@43c. Rye grain was dull at following figures: State and Pennsylvania ungraded on track 54@55c.; do afloat 58@58c.; No. 2 Western 56@57c. delivered; No. 1 State 58@59c. delivered. Barley was dull but steady, with holders firm. Quotations: Two-rowed State 50@51c.; six-rowed do 53@55c.; Western 50@55c. for malting; No. 2 extra Canada 63@64c.; No. 2 do 59@60c.; ungraded do 60@70c. Malt was nominal in open market. Quotations: Country-made old 70@85c.; new do 80@85c.; two-rowed State old 67½@72½c.; new do 70@75c.; six-rowed old 67½@75c.; new do 75@80c.; Western old 45@72½c.; new do 55@80c.

Wheat flour was moved only at concessions on grades below superfine and No. 2 winters. The market was dull generally. The receipts were 12,513 sacks and 28,594 barrels, and the exports 20,700 sacks and 15,688 barrels. The quotations were:

SPRING FLOUR.		
	Sacks.	Barrels.
No grade.....	\$1.55@1.65	\$....@....
Fine.....	1.80@2.05	1.95@2.20
Superfine.....	2.05@2.30	2.30@2.65
Extra No. 2.....	2.30@2.60	2.55@2.85
Extra No. 1.....	3.00@3.20	3.25@3.75
Clear.....	3.05@3.35	3.40@3.50
Straight.....	3.80@4.20	4.15@4.70
Patent.....	4.50@4.75	4.75@5.15

WINTER FLOUR.		
	Sacks.	Barrels.
No grade.....	\$1.70@2.00	\$....@....
Fine.....	2.00@2.10	2.10@2.40
Superfine.....	2.25@2.45	2.25@2.50
Extra No. 2.....	2.40@2.70	2.50@2.80
Extra No. 1.....	2.70@3.70	2.85@3.60
Clear.....	3.25@3.60	3.55@3.85
Straight.....	3.85@3.90	4.20@4.50
Patent.....	4.10@4.30	4.50@4.90

CITY MILLS.		
W. I. grades.....		4.30@4.40
Low grades.....		2.40@2.50
Patents.....		4.80@5.40

A New York journal says: The Minneapolis millers are having a good deal of fun at one another's expense. Several have shut down their mills and given out for the morning papers that it was the profitless condition of the flour trade that compelled it until wheat should drop to the level of flour. Other millers sent dispatches to New York saying that the aforesaid millers are short of wheat in Chicago and did this for a big bluff to break wheat. Next came a dispatch saying the authors of the latter are long of wheat in Chicago will be in order, and both are likely to be true, for they will do it.

Rye flour was dull at \$3.10@3.20. Buckwheat flour was dead and nominally \$1.40@1.55 per bag. Corn products were dull and unchanged, but steady at the following quotations: Coarse, in bags, city and country, 76@81c.; fine yellow 91@95c., and fine white 93@96c. Western and

Southern in bbls. \$2.50@2.60, and Brandywine \$2.65.

Thursday brought not much change in the markets. January wheat closed at 86½c., with receipts 104,000, exports 158,347, spot sales 36,000, and options 3,720,000 bushels. January corn closed at 38½c., with receipts 175,800, exports 94,851, spot sales 138,000 and options 2,232,000 bushels. January oats closed at 28½c., with receipts 96,000, spot sales 91,000, and options 85,000 bushels. Wheat flour was more active and weak, with receipts 24,848 packages, and sales 22,650 barrels. The minor lines were unchanged.

BUFFALO MARKETS.

WHEAT—There is no change in prices here. No. 1 hard sold to-day at 91c; No. 1 Northern 88½c; No. 2 do is quoted at 85½c; No. 2 red winter sold at 84½c, No. 2 white at 78c. Very little trading is going on here, but the feeling firm. CORN—No. 3 corn is quoted at 32½c and No. 3 yellow at 33½c; No. 4 corn is 31@31½c, and No. 4 yellow is 32½c. Not a great deal is done, however. OATS—No. 2 white oats were sold to-day at 26½@27c, and some at 27½c. No. 2 mixed are quoted at 25c. Those sold at 26½c were in the elevator, which is equal to 27c on track. RYE—Quotations are nominal at 53c on track, but there is no trading here. BARLEY—There is no change to report. No. 1 Canada is still at 65c; No. 2 do at 55@60c, and No. 3 at 52@55c, but holders are asking a full cent more. No trading is reported. OATMEAL—Akron, \$6.00; Western, \$5.75 per bbl.; rolled oats, in cases, 72 lbs., \$3.25. CORNMEAL—Coarse, 80@85c; fine, 85@90c; granulated, \$1.50 per cwt. MILLFEED—City ground coarse winter, \$11.00@11.50 per ton; fine do, \$11.00@11.50; finished winter middlings, \$13.00@14.50; coarse spring do \$11.50@12.00.

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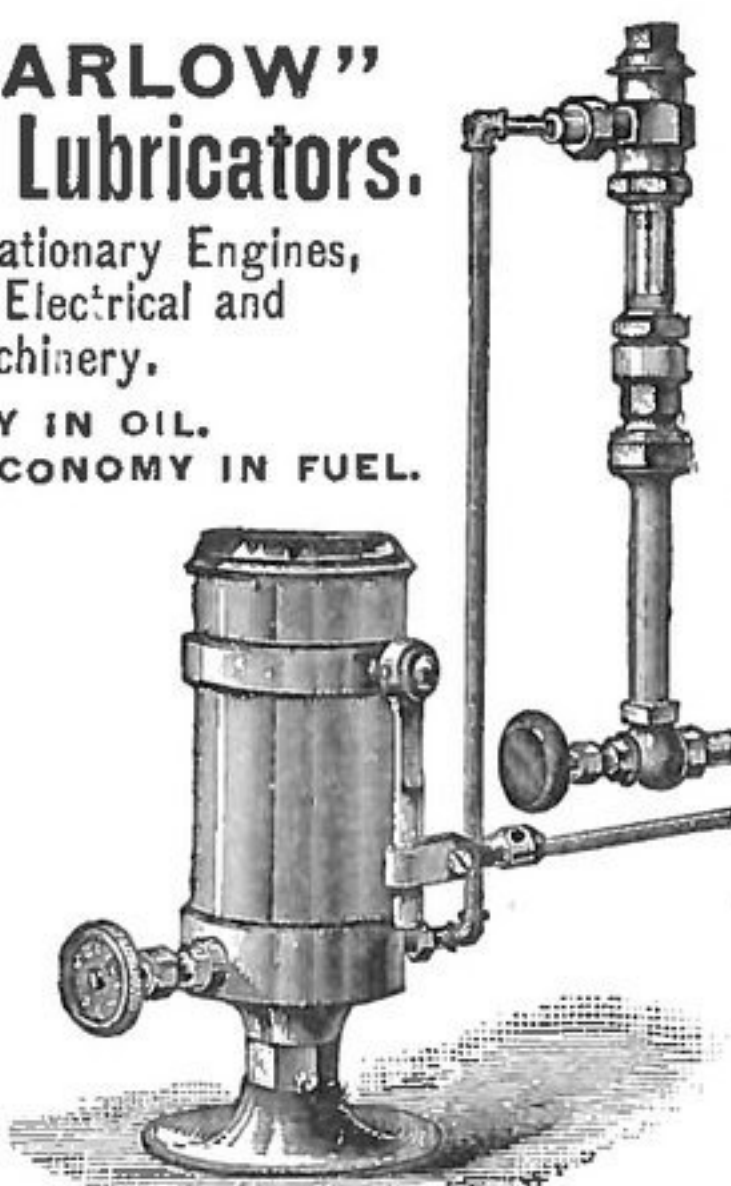
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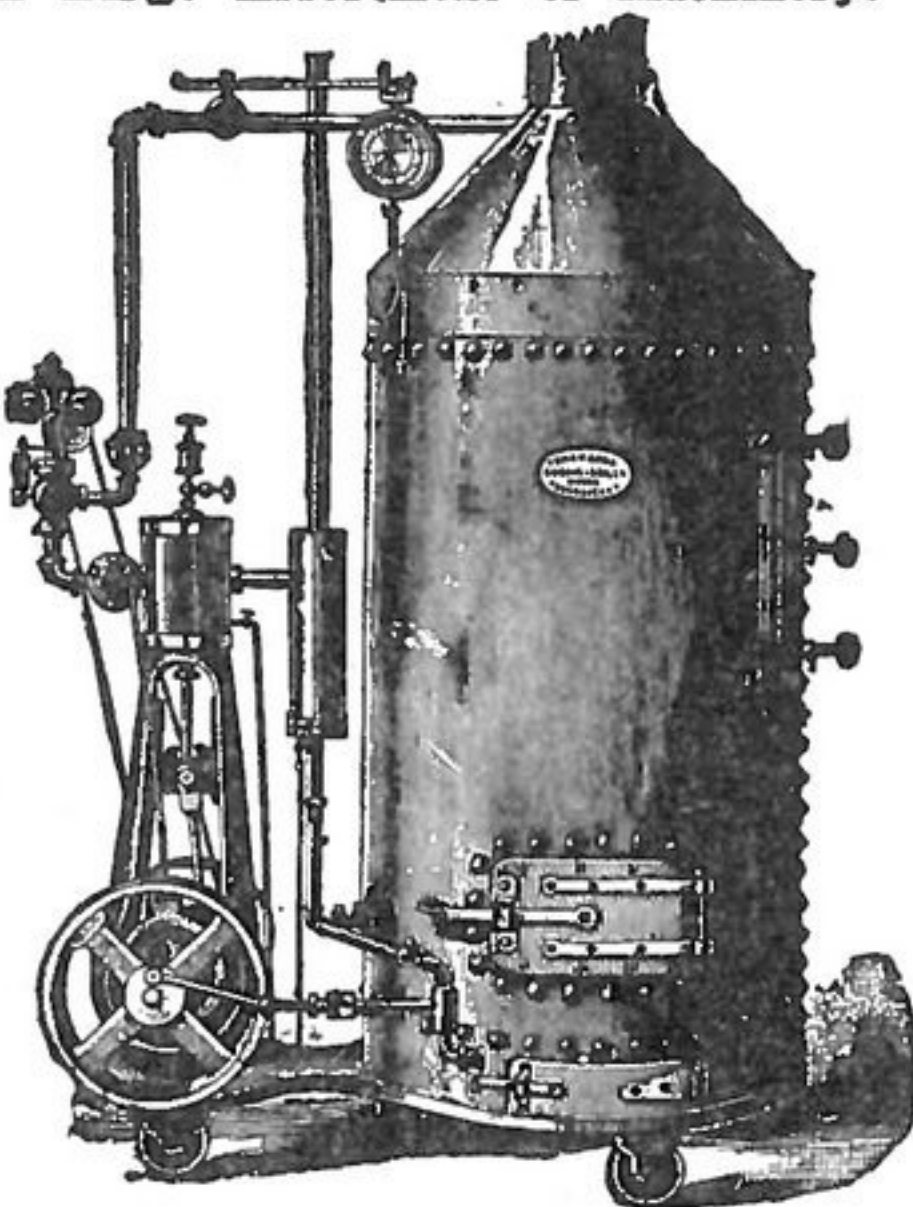
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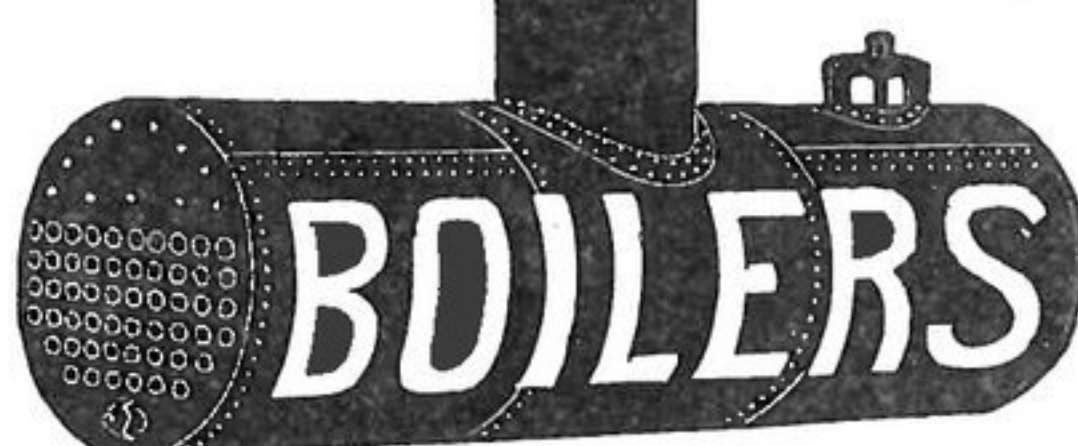
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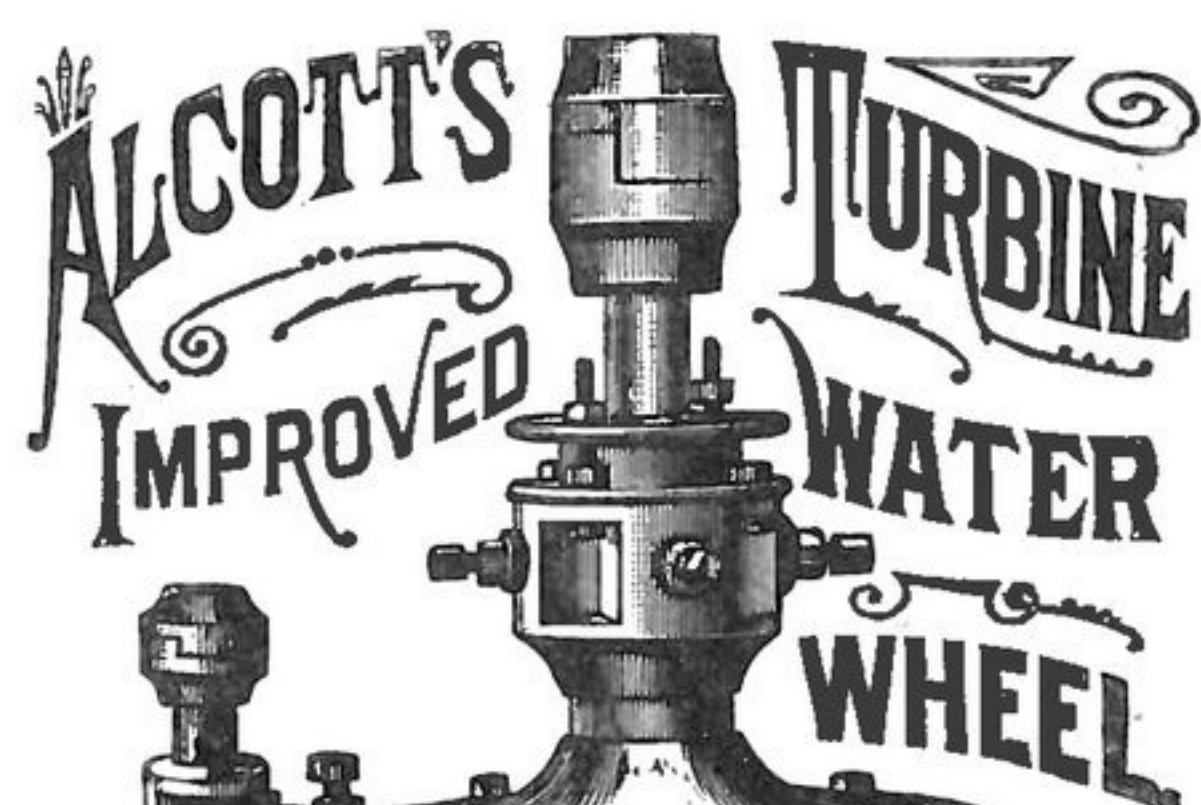
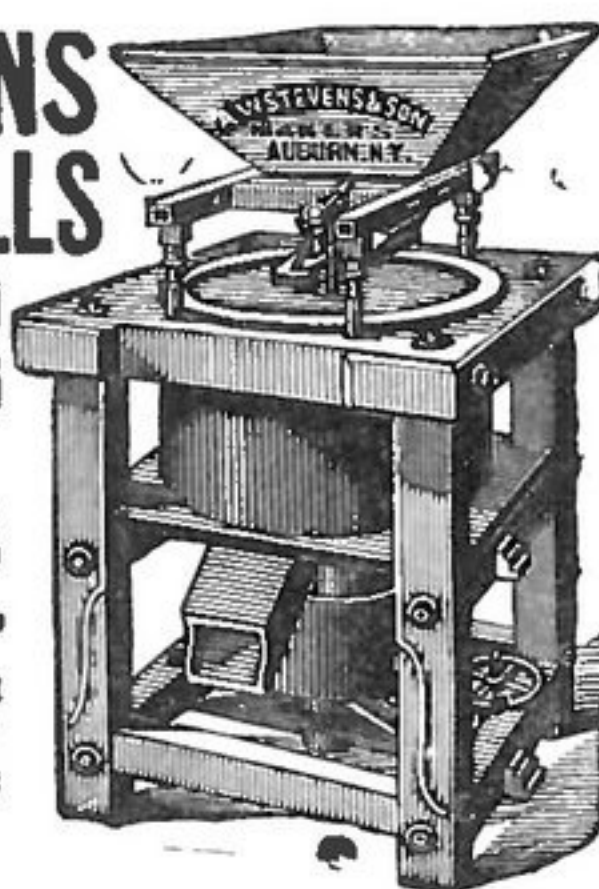
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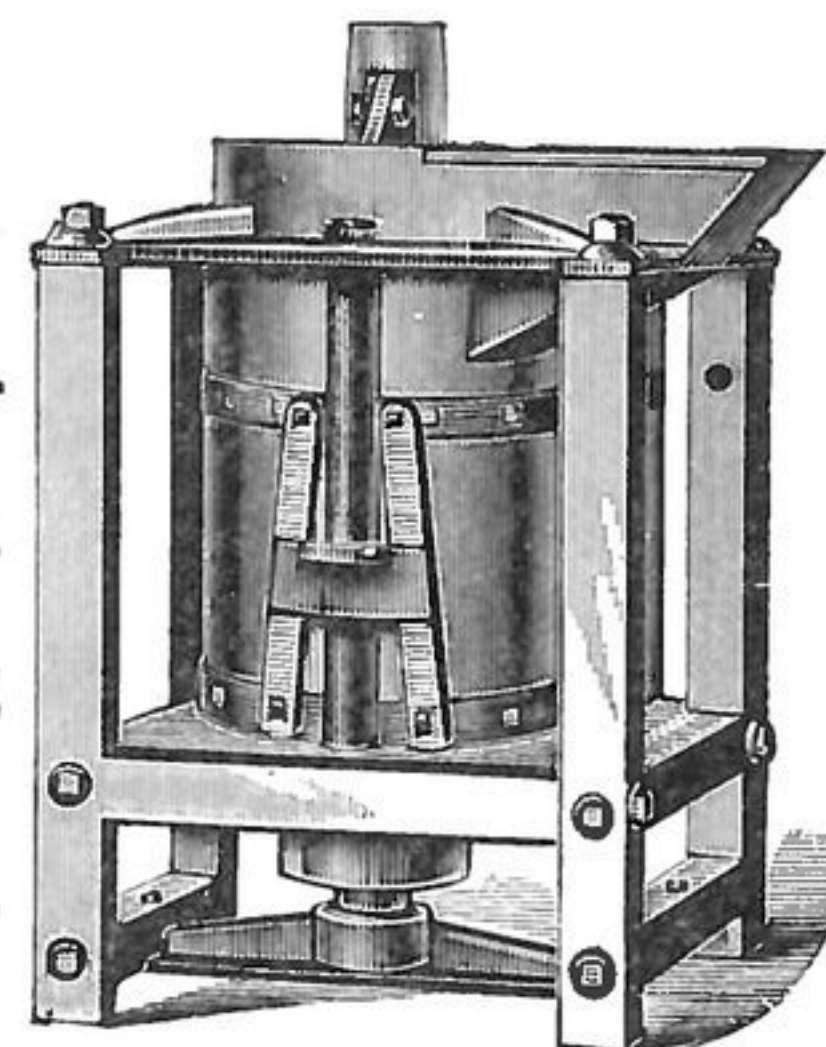
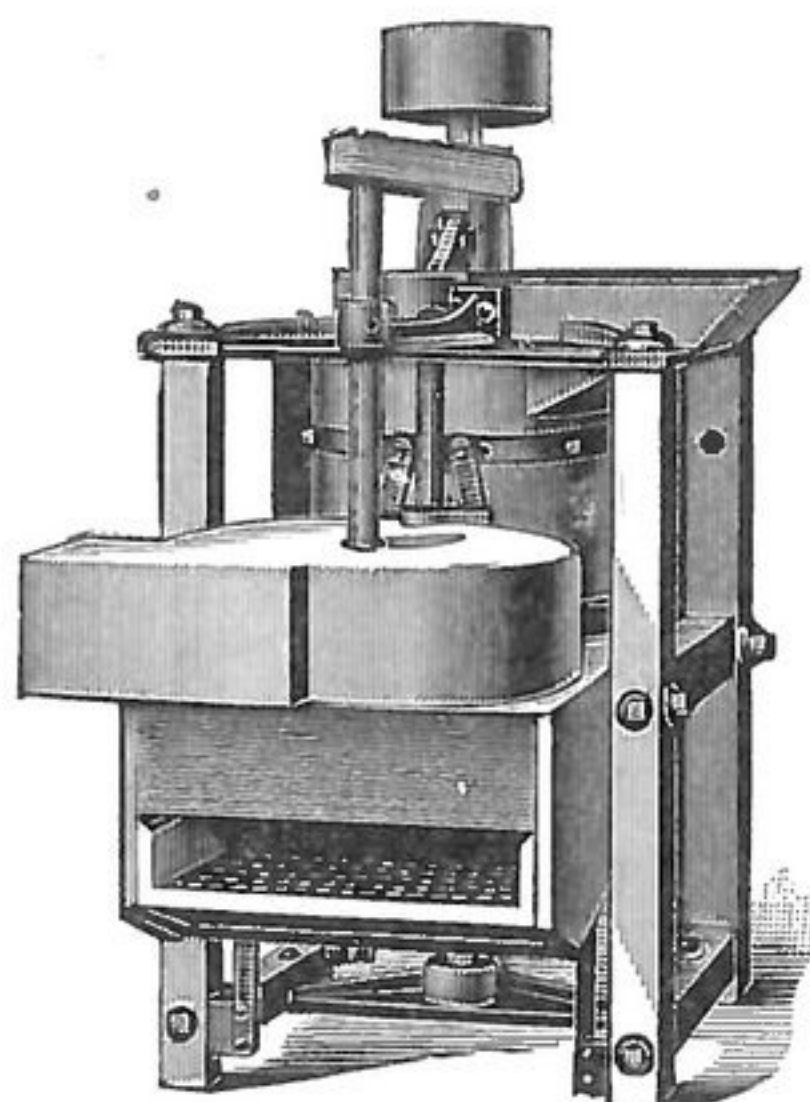
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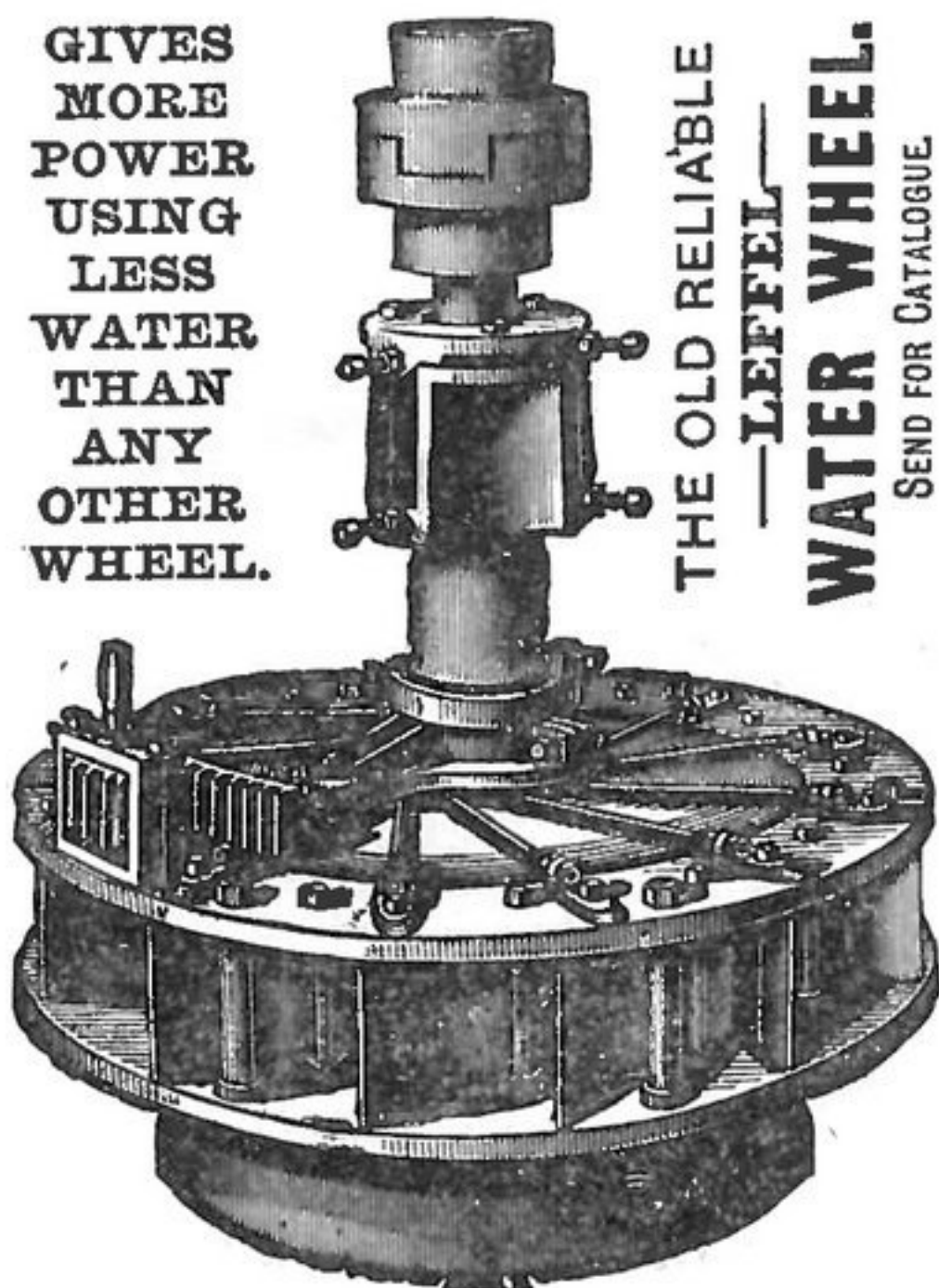
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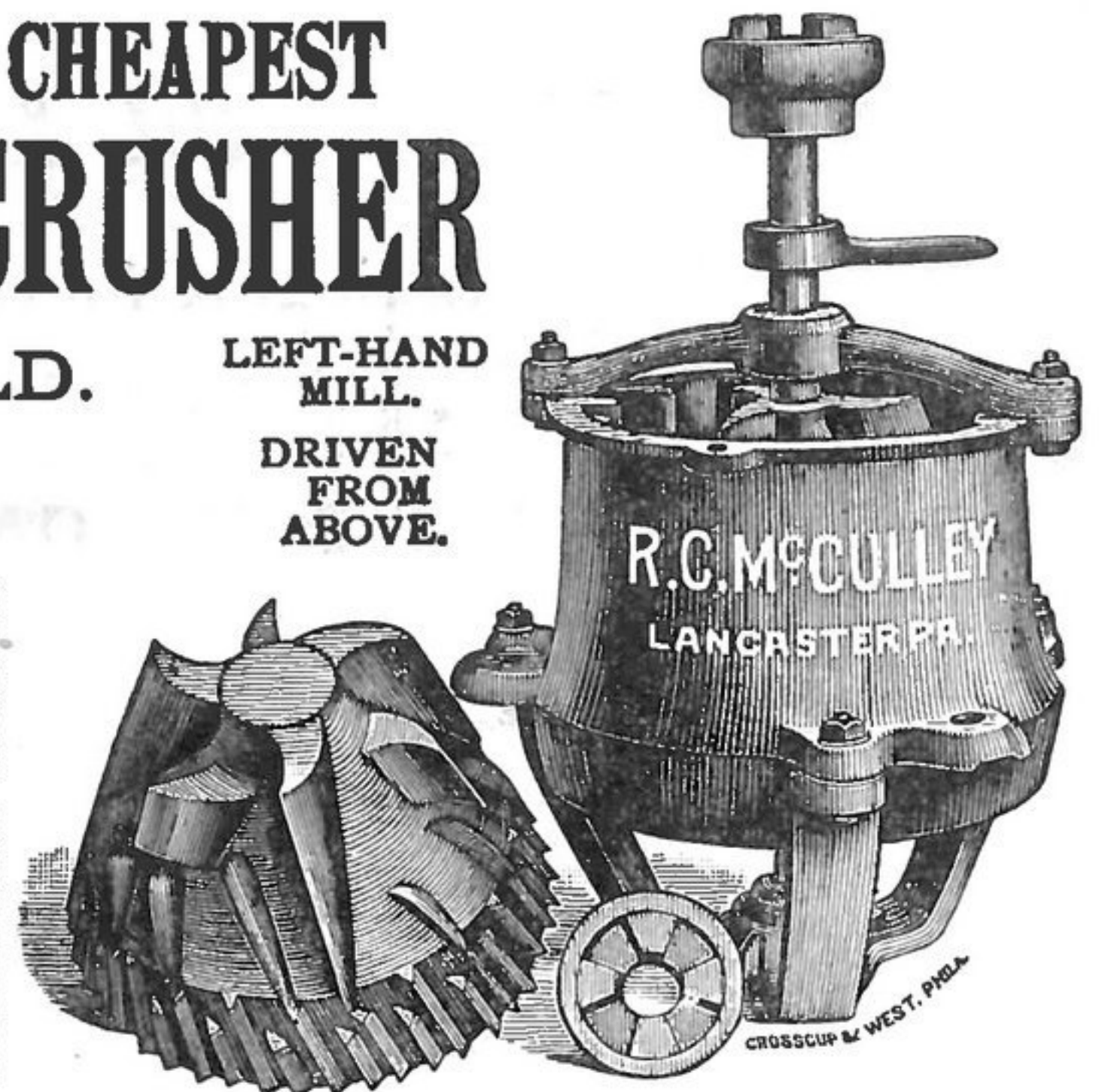
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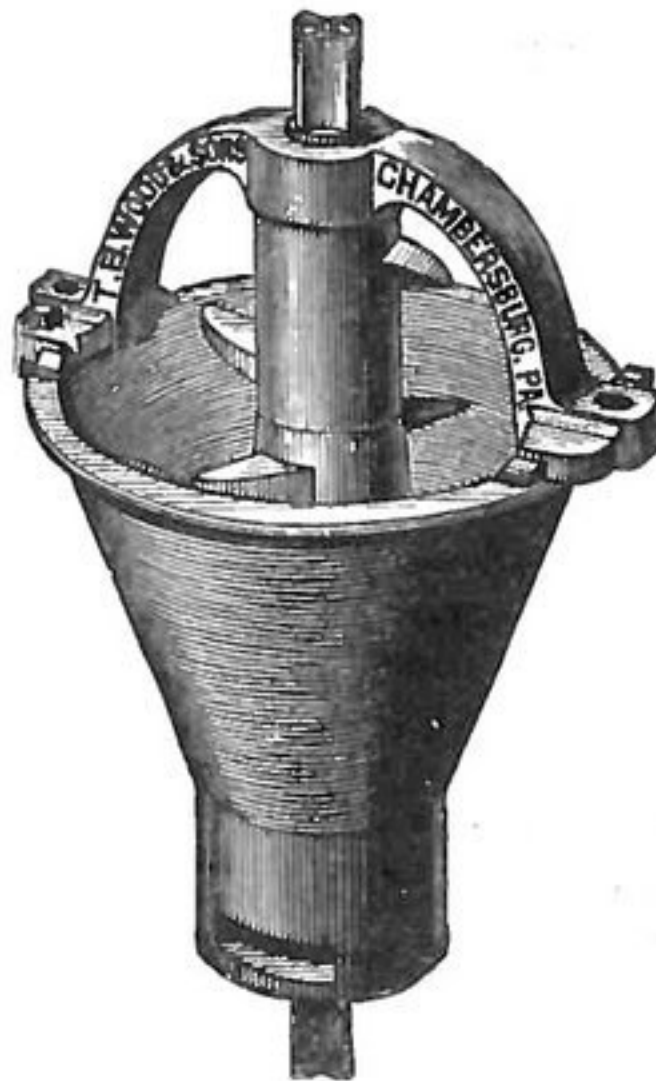


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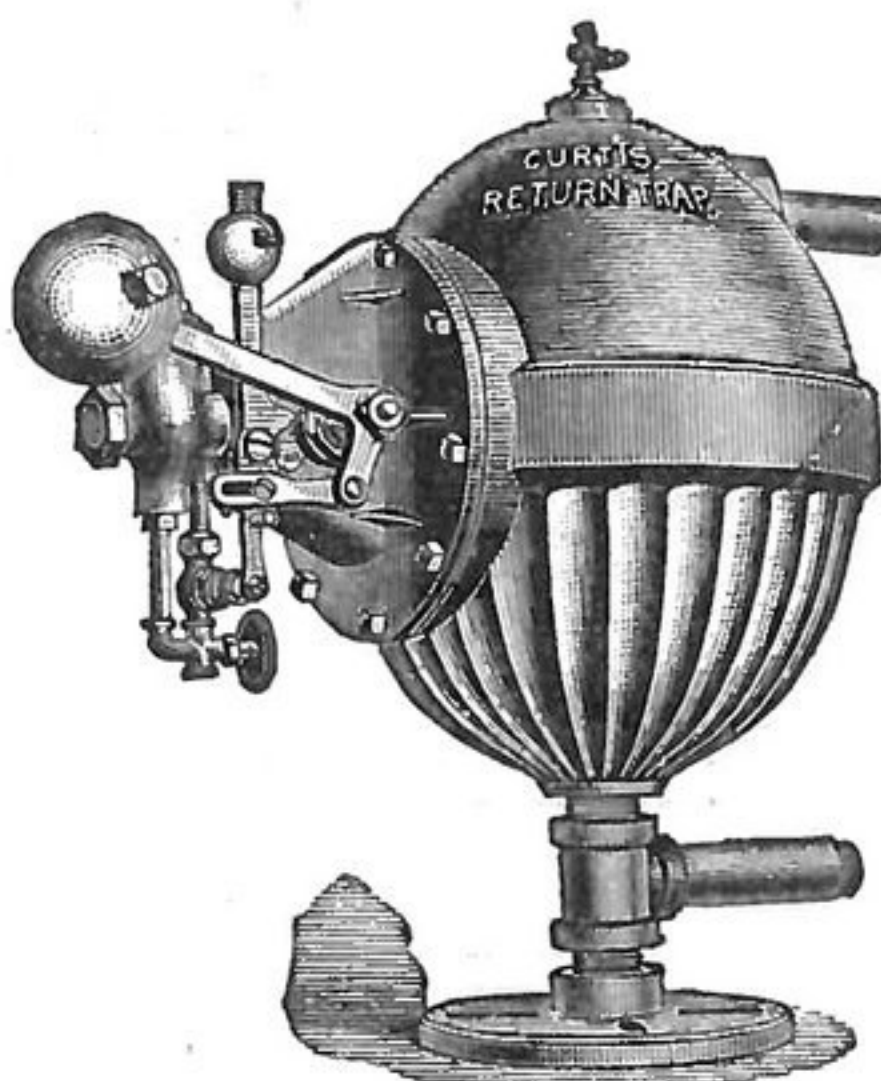
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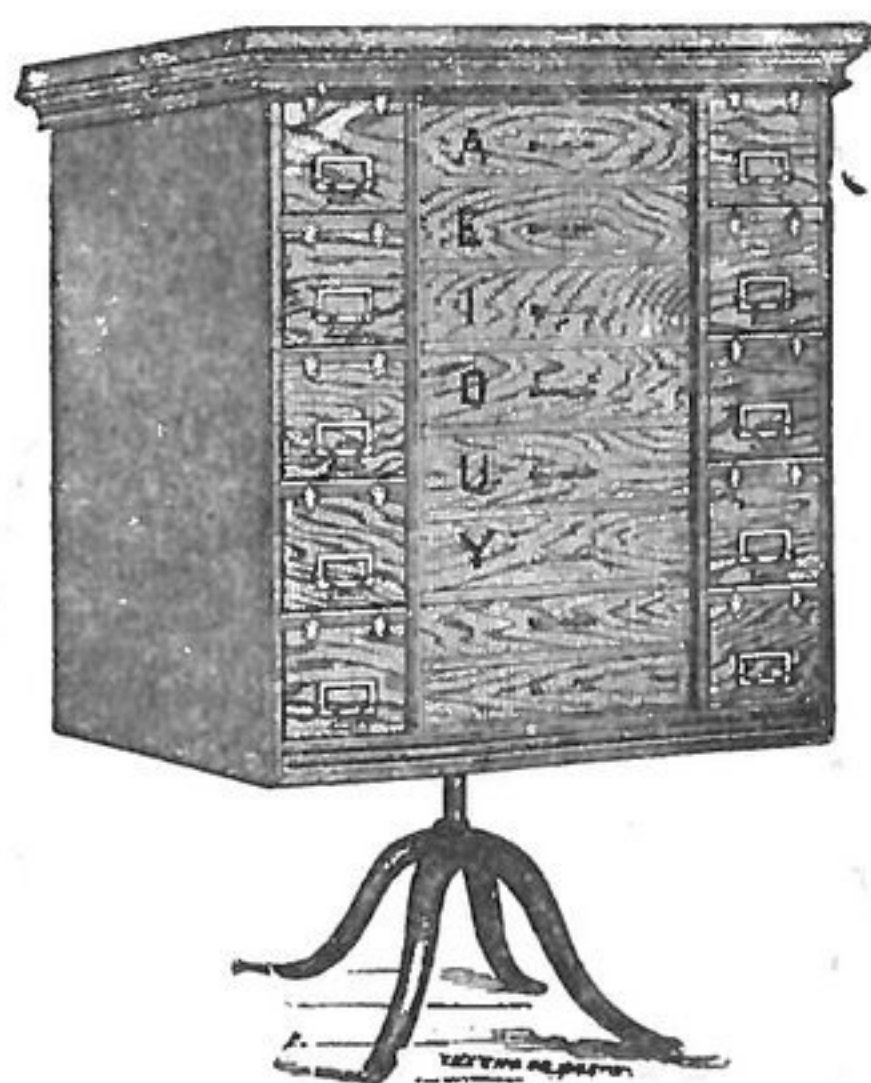
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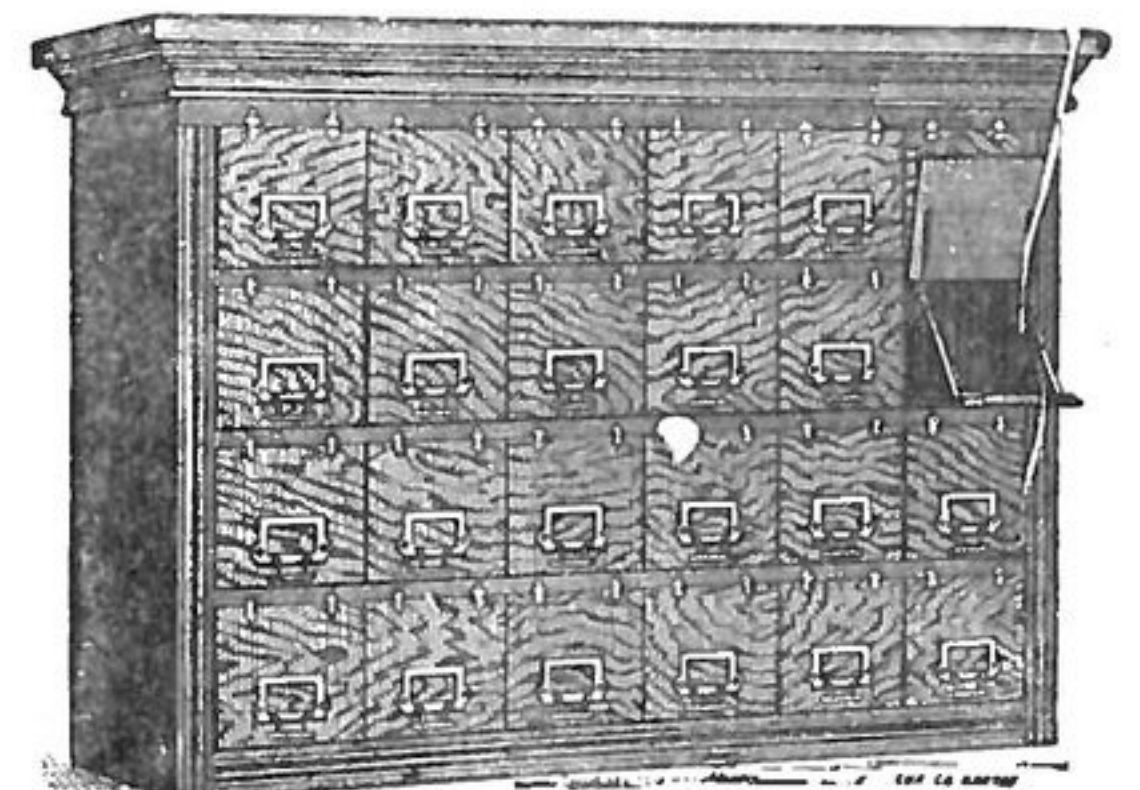
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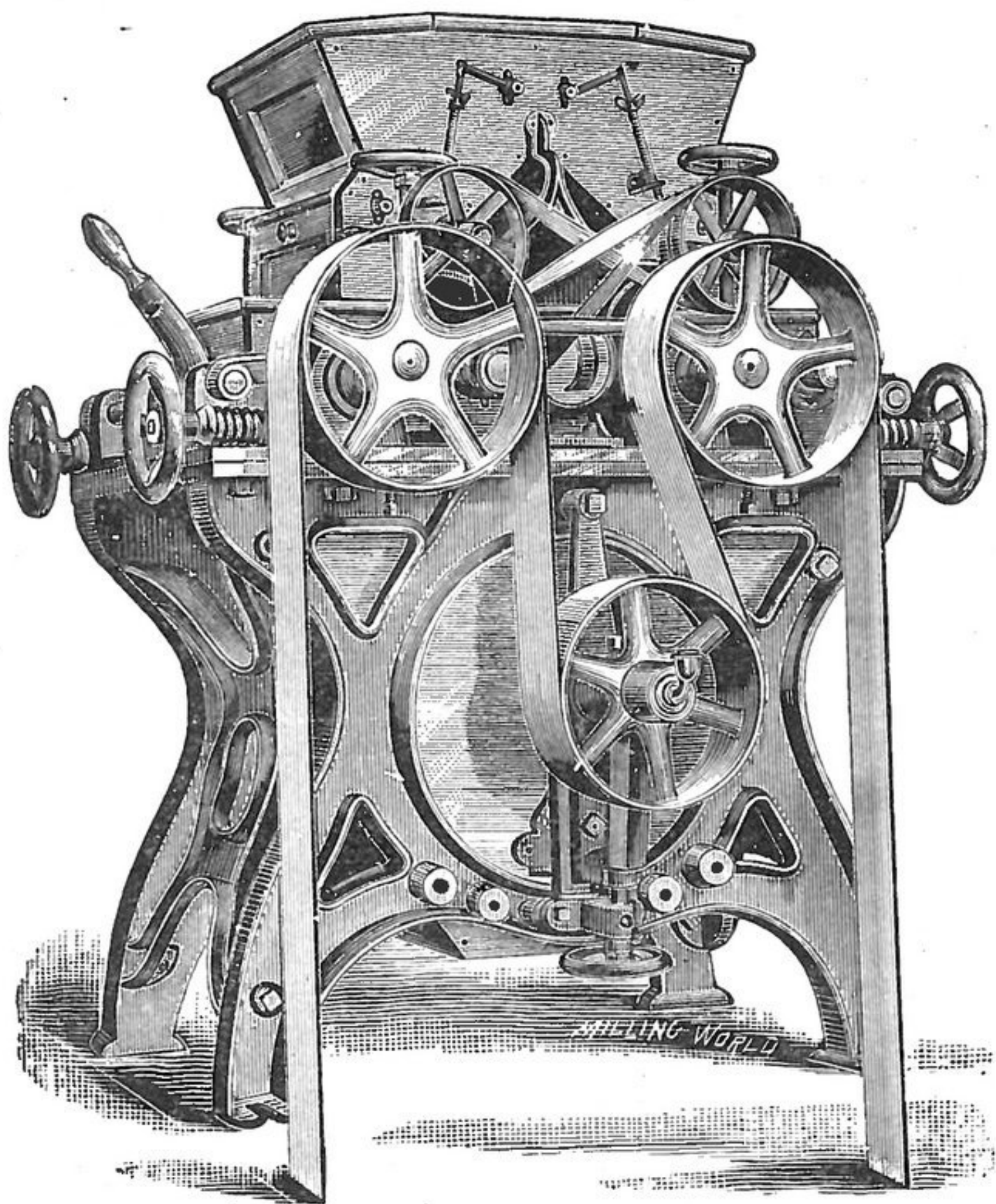
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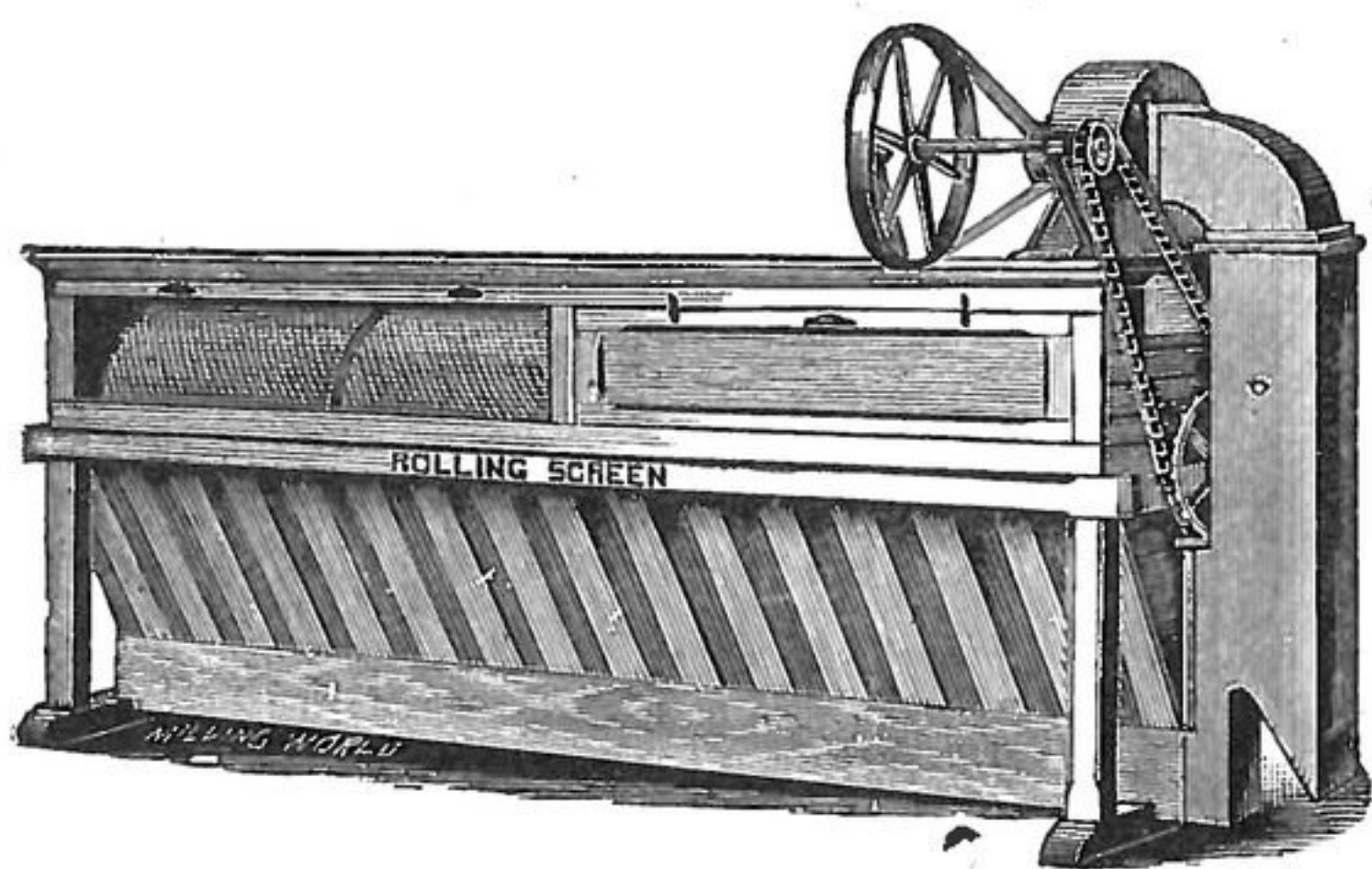
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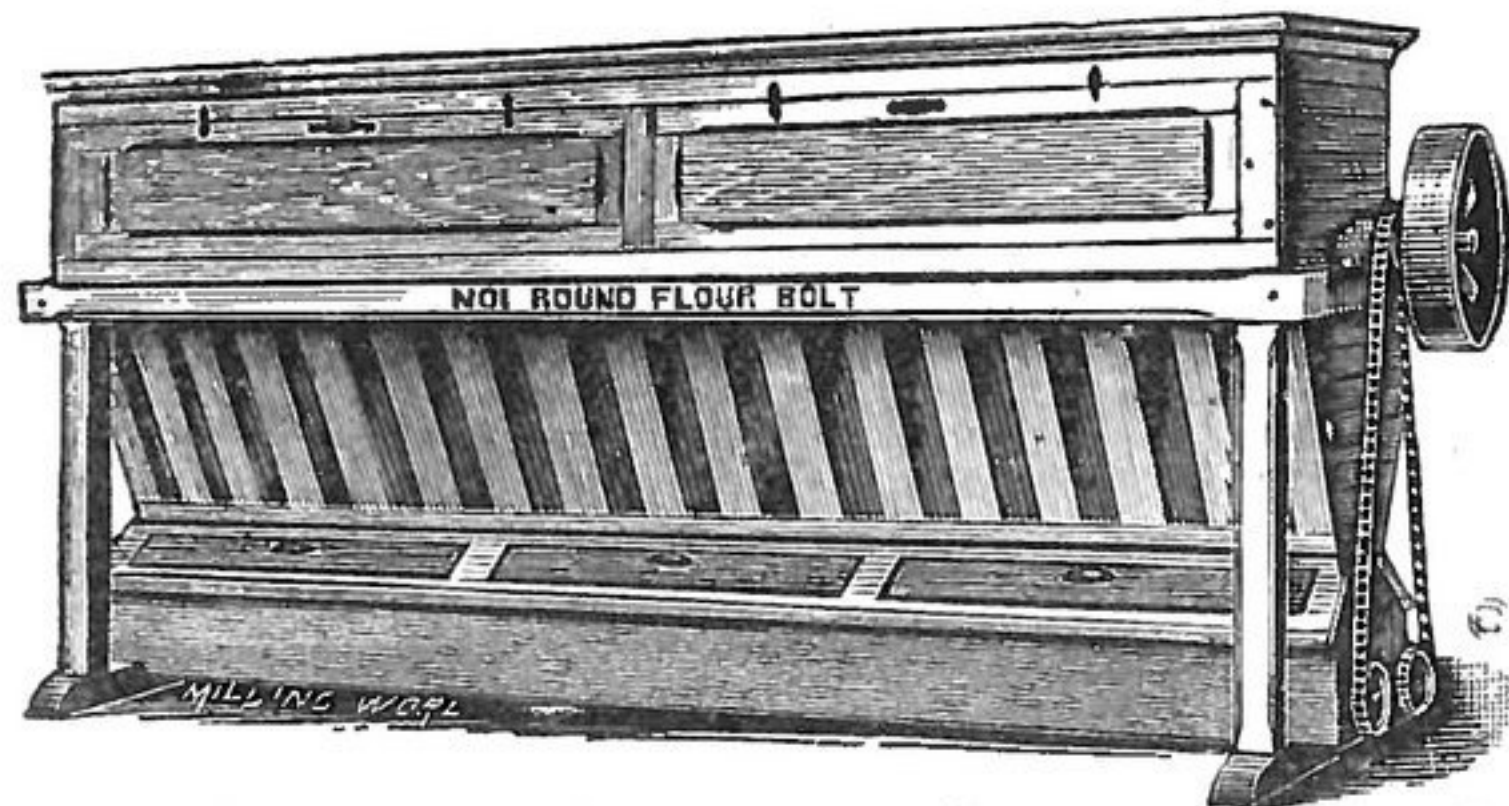
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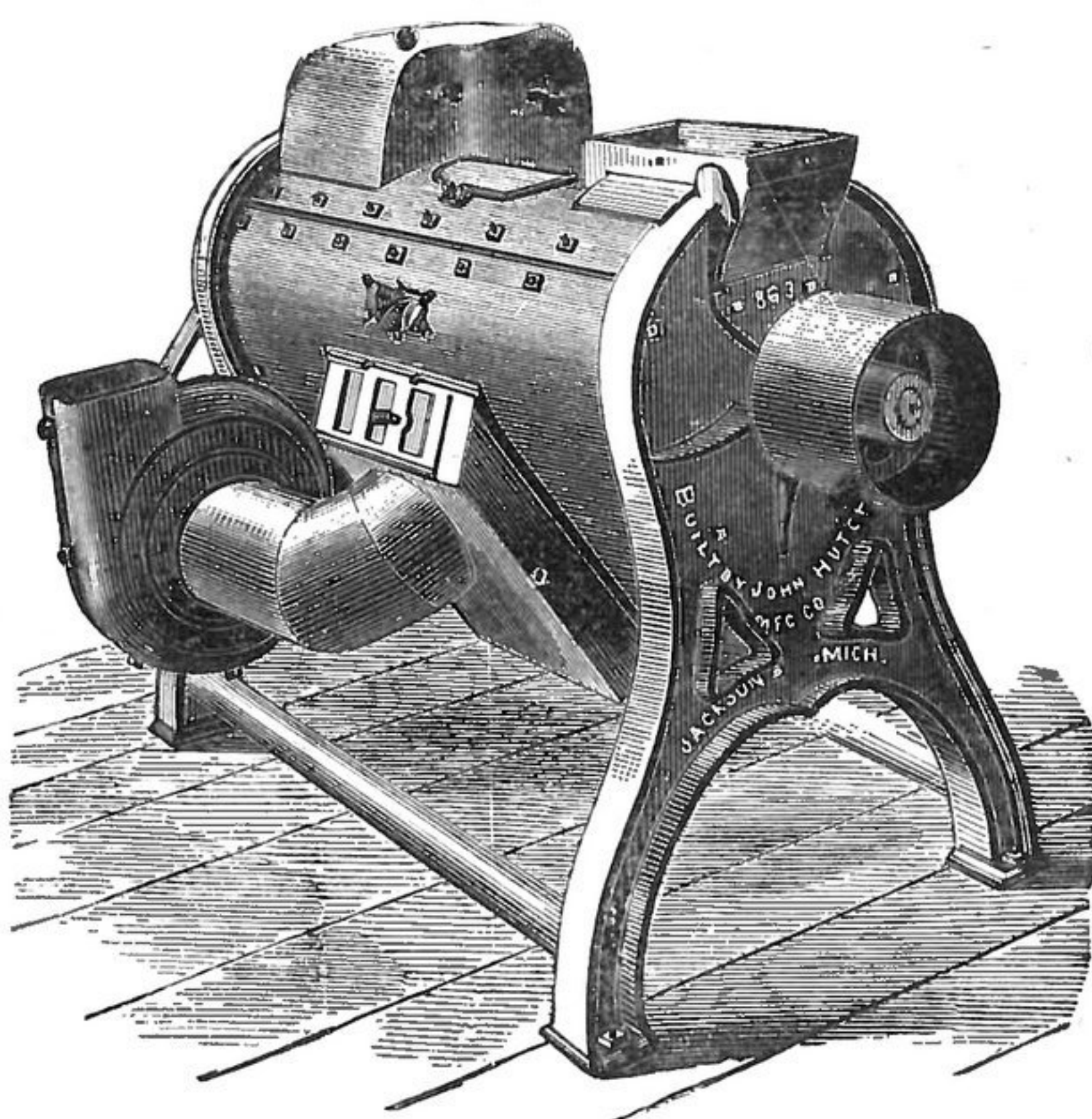


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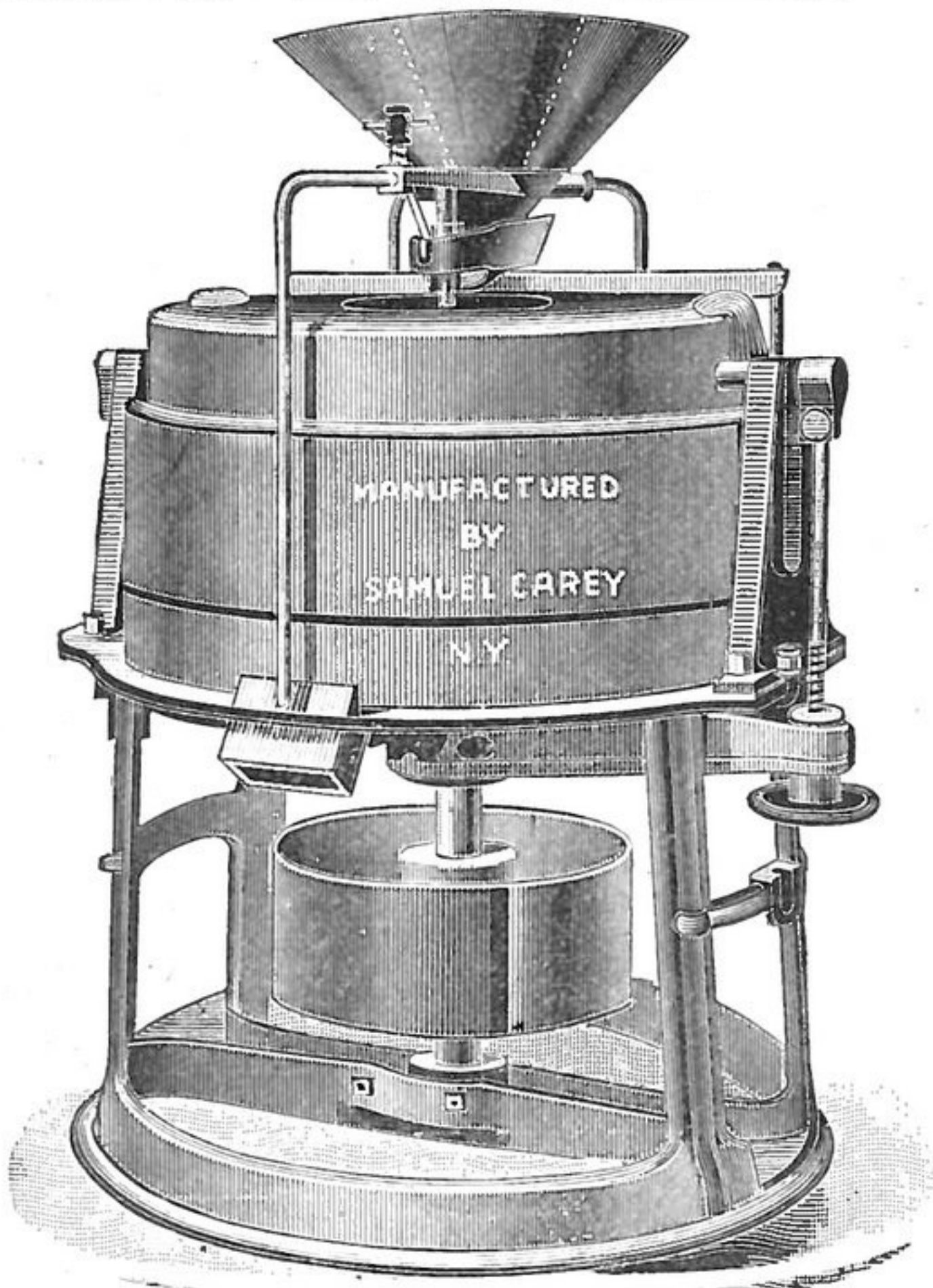
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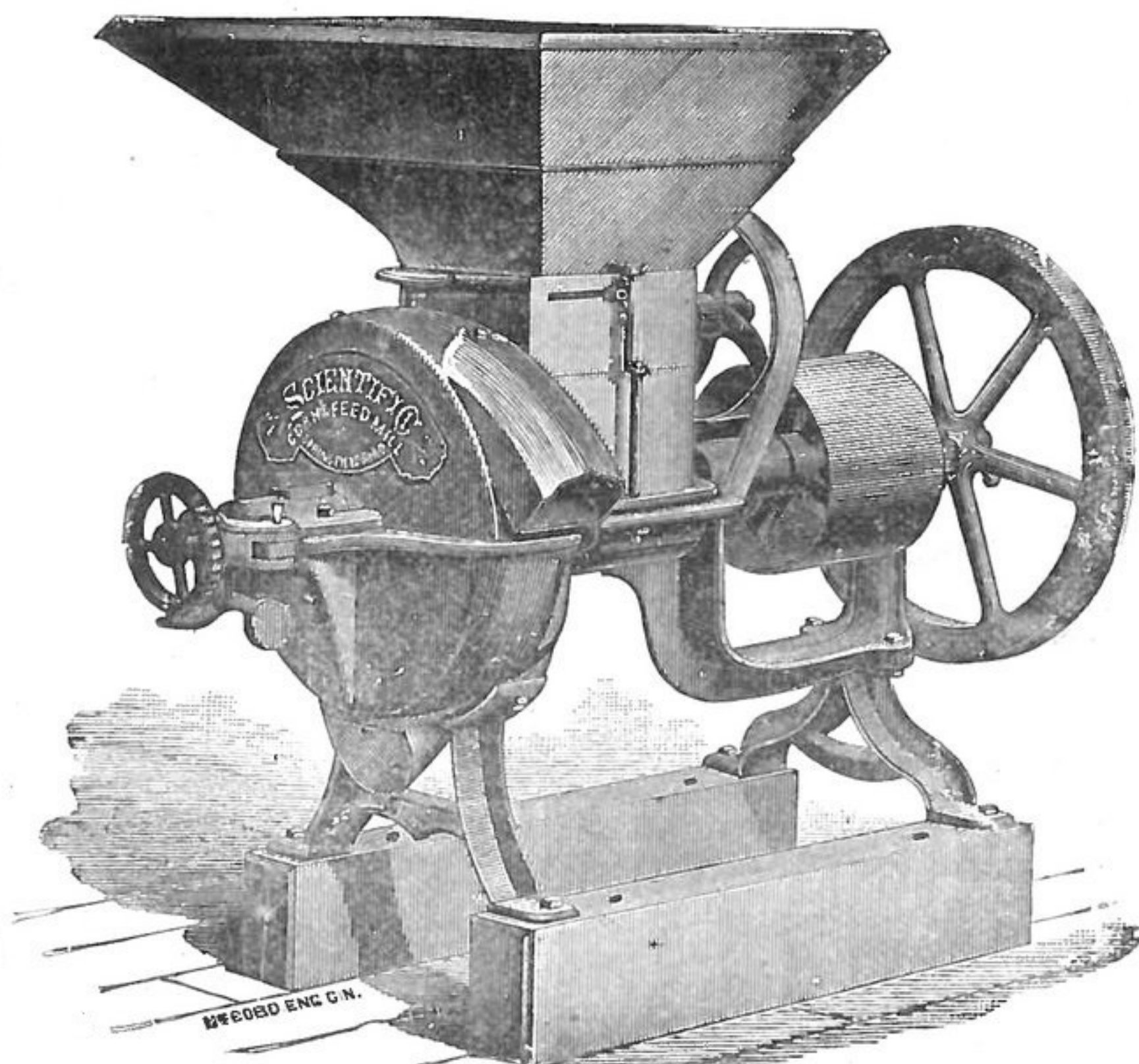
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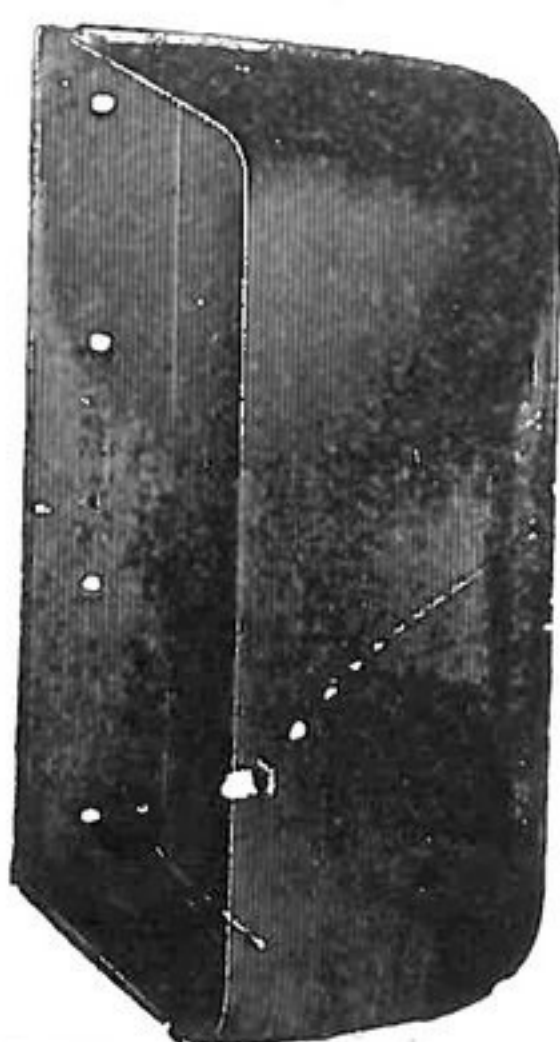
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